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Instituting Environmental Protection: From Red to Green in Poland

Daniel H. Cole

Indiana University Maurer School of Law, dancole@indiana.edu

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INSTITUTING ENVIRONMENTAL PROTECTION

*From Red to Green
in Poland*

Daniel H. Cole

Instituting Environmental Protection

Instituting Environmental Protection

From Red to Green in Poland

Daniel H. Cole

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*For my family
and in memory of my grandfather, Harry D. Pierce*

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Preface to the 2016 Creative Commons Edition

This book initially was published by Macmillan and St. Martin's Press in 1998. In 2014, at my request, the publisher returned to me all publication rights. Not surprisingly, Palgrave Macmillan concluded that the book no longer had any profit potential. Given that, why would I want to recover publication rights? Well, certainly not for economic profit (after all, I've placed the book into the Creative Commons). But I do believe the book can still profitably be read by environmental policy makers in China and other countries for whom this book's lessons remain relevant.

Ostensibly, it is a book about the failure of environmental protection in Communist Poland. But it was never just a book about Poland. Poland was merely the object case to illustrate more general, systemic impediments to pollution control in single-party states with socialist economic systems. Those impediments include, most prominently, endemic soft budget constraints of state-owned enterprises, conflicts of interest faced by environmental regulators attempting to control emissions from enterprises in which the state has a direct financial stake, and bureaucratic career incentives that always seem to favor economic production over environmental protection in single-party states.

Consider China. For decades now, China has proclaimed improved environmental protection as a high-level national goal. New policies are announced, which receive widespread media attention. And it is taken as an article of faith that China's Communist Party can more or less easily accomplish whatever policy goals it enunciates. That is simply not the case.

This seventeen-year-old book about Poland provides an ongoing cautionary tale for China. It shows that even well-intentioned environmental policies of totalitarian states are likely to face substantial, systemic impediments. The combination of soft budget constraints and regulatory conflicts of interest presents a formidable obstacle that Communist Poland was unable to overcome, and so far has stymied China's Communist Party/state.

Of course, China in 2016 is not Poland in 1985. The differences are too numerous to mention, ranging from the cultural to the structural. For instance, most sectors of China's economy have been opened to competition among private producers—something that did not happen in Poland before the fall of the Communist Party. To the extent China's markets are subject to market competition, the

problems identified in this book have little relevance. But, and this is the crucial point, several of the most heavily polluting sectors of the Chinese economy, including for example energy production and steel manufacturing, remain dominated by state-owned enterprises, which are not subject to competitive pressures. With respect to those sectors—the last vestiges of China’s socialist economic system—there is every reason to believe that the experiences of Communist Poland have at least some relevance. The Chinese Communist Party has, in fact, found it difficult to make environmental penalties stick against its biggest polluters and to create career incentives for the bureaucrats that manage big polluters (China’s version of Poland’s *nomenklatura*) to implement official state environmental policy. When push comes to shove, China’s economic production and growth imperatives always seem to override environmental protection mandates, however sincerely intended. In that respect, China suffers from precisely the problems I write about in this book.

Poland in 2016 does not suffer from those problems, which is not to say that it has ‘solved’ all of its environmental problems—no country can claim to have accomplished that feat. Poland today has similar pollution problems to other industrial democracies with similar per capita incomes. The environmental improvements that began virtually as soon as the socialist economic system fell (as recounted in Chapter 7) have continued as the country’s economy (and industrial output) have grown. Poland is no longer mentioned as among the most polluted countries on earth, even if its environmental performance still lags (marginally) that of more affluent EU member states. At a personal level, I no longer worry, as I did in 1989 or 1990, of returning from every visit to Poland with a case of acute bronchitis. (By contrast, I would worry about the respiratory consequences of a trip to any major city in China today.)

I have made no substantive changes to the original text. Several typographical and other minor errors have been corrected. My Ostrom Workshop colleague, Patty Lezotte, has done a brilliant job redesigning and typesetting the text. And I am grateful to Palgrave Macmillan for returning to me the publication rights.

When I initially completed the book, I dedicated it to my wife Izabela and our daughter Marysia. By the time the book was in print, Marysia’s brother Stefan had joined the family. He is now eighteen years old and preparing to start college at Indiana University. I am very happy to have the opportunity to dedicate this Creative Commons edition of the book to him along with his sister and mother.

Daniel H. Cole
Bloomington, Indiana
March 2016

Acknowledgments

I acquired many debts of gratitude during the six years I spent researching and writing this book. First and foremost I want to thank my wife, Izabela Kowalewska-Cole, and daughter, Marysia, for their patience and constant encouragement. The extent of their contribution to this project cannot be overestimated, and words are insufficient to express my adoration and appreciation.

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I am fortunate to teach at a law school, the Indiana University School of Law at Indianapolis, where my obsession with Polish law and culture is not only tolerated but actively supported. For this I want to thank Dean Norman Lefstein and my faculty colleagues. Two of my colleagues (and friends) in particular, David Papke and Michael Heise, read each and every chapter hot off the printer. Their thoughtful comments, gentle criticisms and generous encouragement energized my work.

I conducted research for this project between 1990 and 1995 at several locations in Poland and the United States, and I have many debts to repay at each location.

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comfortable working environment. They, along with the rest of my wife's family, have my loving gratitude.

In Kraków, Andrzej Mania secured an invitation for me to study at the Jagiellonian University's libraries. The reference librarians, especially in the law school library, were extremely courteous and helpful. During my time in Kraków my friends Hanka and Waldek Martyniuk put me up at their home. Waldek also was one of my Polish language instructors (at Stanford), along with Magda Szelc-Mays and Władysław Miodunka. (*Oni nie mają sobie równych.*)

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In the United States, I must start with my research assistant Rafał Ofierski who, as a native Pole and an American lawyer (with substantial research and practice experience in environmental law), was uniquely qualified to help me track down and translate Polish-language legal documents. Rafał's good work saved me much time and effort. Another research assistant, Chris Brown, did yeoman's service hunting in the archives of the Joint Publications Research Service. At the Hoover Institution Library at Stanford University, Maciej Siekierski provided stacks of documents from Poland's underground press relating to environmental problems and the independent environmental movement. At the Indiana University School of Law at Indianapolis, Jim Bailey deserves credit for amassing an unparalleled collection of Central and East European legal periodicals, and Beverly Bryant deserves special mention for handling hundreds of my interlibrary loan requests.

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Introduction

A Failed Promise: Socialist Environmental Protection

In 1971, during an environmental conference sponsored by the United Nations in the former Czechoslovakia, Mayor Zdeněk Kupka of Ostrava (that country's second-largest city) proclaimed socialism to be superior to capitalism in environmental protection. Pointing first to the old capitalist-era factories belching plumes of black smoke and then to the newer and apparently cleaner factories built by the Communist Party/state, the mayor declared that 'the new system is solving the city's environmental problems' (*New York Times*, May 16, 1971).

Mayor Kupka's proclamation met with little dissent on either side of the Berlin Wall. No one denied the ecological failings of capitalism, which were well and frequently publicized by the American and European media. Meanwhile, throughout the 1970s and into the 1980s reports of environmental problems in Communist Eastern Europe were few and far between. For some (including a fair number of Western economists) this simply confirmed the inherent environmental superiority of the socialist system. It stood to reason: socially owned industries did not operate from an environmentally harmful profit motive; and central socioeconomic planning presumably ensured the rational utilization and conservation of natural resources. As Karl-Heinrich Hansmeyer and Bert Rürup (quoted in Zweigert and Gessner, 1976, 93) suggested, '[i]ndustry working under an ideal central plan for the economy should not create any specific environmental problems.' In the Communist Party states, this became an ideological truth as certain as any Aristotelian syllogism. From the premise that environmental problems stemmed from capitalist relations and modes of production, Party/state leaders logically deduced that pollution could not even exist under socialism.¹ But, as with all logical proofs, the conclusion was only as sound as the premises.

During the 1970s, mounting evidence of substantial and increasing pollution levels in the socialist economies eroded the premise that environmental problems arose only under conditions of industrial capitalism. By the late 1970s, Party/state officials were compelled to concede that environmental problems existed but, they maintained, such problems were not endemic to socialism, as they were to capitalism; on the contrary, only the progress of scientifically planned socialism could and ultimately would eradicate pollution and other negative effects

of industrialization and economic growth. In other words, pollution in socialist economies was viewed, in Charles Ziegler's (1987, 26) words, as a 'temporary anomaly, a deviation from the environmentally benign norm that will be resolved as socialism advances.' But that claim exploded in 1986, along with the nuclear power plant at Chernobyl in the former Soviet Ukraine. After Chernobyl, the environmental policies and practices of Communist countries came under intense domestic *and* international scrutiny. Apparently government ownership, control and planning did not guarantee environmental preservation after all.

Three years after Chernobyl, all remaining myths of socialism's inherent environmental superiority fell along with the Berlin Wall. Behind the iron curtain stood another curtain of poisonous smog so dense that in some places sunlight could not pierce it.² Between 1971 (when Mayor Zdeněk Kupka declared that the socialist system was solving all of Ostrava's environmental problems) and 1985, sulfur dioxide concentrations in the region increased by more than 50 percent (Vavroušek 1990, 23, table 3). By the late 1980s, Ostrava was a poisoned city located within the most heavily polluted region on earth, the 'Black Triangle' of southeastern East Germany, southwestern Poland and the northern Czechoslovakia.

In the Black Triangle and throughout the former Soviet Bloc, severe pollution had (and continues to have) catastrophic impacts on natural resources, national economies and public health. During the late 1980s in Poland, for example, half of all river water was unfit for industrial use, let alone for human consumption; in Kraków, Poland's medieval 'city of kings,' acid rain was literally dissolving one of the greatest collections of Renaissance architecture in Europe; 60 percent of all food produced in the Kraków region was considered unfit for human consumption because of massive concentrations of metals that contaminated the soil; in the industrial region of Katowice, 40 miles to the west of Kraków, two-thirds of all 10-year-olds suffered from mental and physical disabilities as a result of pollution; and some Polish scientists predicted that by the year 2000, one-quarter of the country's population would develop some form of pollution-related cancer.³ Meanwhile, Poland's ecological crisis was costing the Polish economy between 10 and 20 percent of gross national income (see *Radio Free Europe/Report on Eastern Europe*, October 5, 1990). These shocking, almost inconceivable statistics may appear to make People's Poland an extreme or unique example, but its experience was, in fact, representative of the former Soviet Bloc as a whole. From all appearances, the extent of environmental devastation in the socialist East at least matched, and probably exceeded, anything ever experienced in the capitalist West.

Subject and Object

This book's purpose is to explain the failure of environmental protection under socialism. This purpose has both positive and normative components. The positive goal is to describe comprehensively the causes of the failure of environmental

protection in People's Poland. The normative goal is to derive some lessons from this failure about systemic or institutional prerequisites for more effective environmental protection. The thesis underlying both goals is that the environmental failure of socialism was inevitable given certain features of the Marxist-Leninist ideology, the socialist economic system and single-party rule.

Although Poland is the object of study, the book's subject is Marxist socialism, a political-economic system that precipitated similar ecological problems throughout the former Soviet bloc. Indeed, this book might have been written about any country in Eastern Europe. It could not, however, have been written about any country in Western Europe. And that distinction gives this book its impetus. The thesis is that system-specific features of real existing socialism caused or exacerbated ecological crises in People's Poland and throughout the socialist world. This is not to say that the Communist system functioned in precisely the same way in Poland and all other countries of the former Soviet bloc. Although those countries are often lumped together for the sake of academic expediency (and to some extent this book is no exception to that), each developed its own socioeconomic and cultural idiosyncrasies. Few (perhaps only Hungary and the former Yugoslavia) were more idiosyncratic than Poland, which was always among the least doctrinaire and most politically unstable. For that reason Poland may seem a poor choice for a case study of environmental protection under socialism. However, for this type of study Poland's exceptional characteristics make it particularly apt. It is, as John Clark and Aaron Wildavsky (1990, 5) have written, 'the toughest test case.'

People's Poland had (relatively speaking) the most sophisticated environmental protection regime of any Soviet Bloc country (see Juergensmeyer et al. 1991; Cummings 1993). At the same time, Communist ideology and Stalinist institutions were only weakly established there (again, relatively speaking). The Polish Party/state failed to collectivize agriculture; it suffered a powerful oppositionist Church; and it did not repress its population, including environmentalists, nearly as much as did other Communist regimes. Orthodox Marxist ideology (the Marxism of Marx and his most influential Russian interpreters) did not dominate Poland's legal system to the same extent it did others in the former Soviet bloc (see Biernat and Wasilewski 1992, 9). So, if environmental protection failed for systemic reasons in Poland, where environmental protection was relatively well developed and the 'system' relatively weakly established, then what holds true for Poland certainly should hold true for the other former socialist countries. Nevertheless, this book does not focus exclusively on Poland; the analysis (particularly in Chapters 5 and 6) compares and contrasts the experiences of other socialist and non-socialist countries.

Marxist Ideology and the Socialist System

Already, in the first few pages of this Introduction, I have referred to the subject by various names: 'socialism,' 'the Party/state,' 'Marxist socialism,' 'real existing

socialism' and 'the Communist system.' There are, in fact, many labels for the system (or systems) implemented in Marx's name, all of them somehow controversial.

People's Poland was, of course, established on the Soviet model of Marxist ideology. Marx, as is well known, wrote little about the socialist system he espoused, perhaps because he saw it as only a transitional phase between capitalism and stateless communism (so argues Pashukanis 1951, 270–1). He did not provide a recipe for the socialist state, only a partial list of ingredients: (1) the socialist state should be a workers' state, led by the '*revolutionary dictatorship of the proletariat*' (Marx 1938, 18); (2) the 'anarchy' of the free market should be replaced by a scientifically planned economy;⁴ and (3) the state should control the means of production, including property, until the process of re-socialization (that is, de-alienation) is complete and the state withers away.⁵

From Marx's occasional statements about socialism, Lenin elaborated an entire political-economic system. In substantial accordance with Marx's incomplete directions, Lenin's system (1) established the workers' state under the 'leading role' of the vanguard Communist Party, (2) abolished (most) private ownership of land and the means of production, and (3) instituted central planning as the mechanism for ordering economic relations in socialist society. The result, however, was a totalitarian state that Marx might not have recognized as his own design. Inevitably perhaps, political and economic expediency altered Marxist theory on its way to becoming practice. Or were Lenin's interpretations of Marx simply vulgar and self-serving?

This is not the place to decide, once and for all, whether Lenin was faithful to Marx. From the perspective of this book, the answer is not important. What is important is the *fact* of Marxism–Leninism. It is worth noting, however, that the debate is by no means one-sided. On the one hand, Lenin seemed to collapse Marx's entire theory of history into two simple goals: secure power and maintain Party rule. Before the Communists came to power, Lenin judged all ideas good or bad according to their impacts on the revolutionary struggle; after the revolution, the primary criterion for decision making became the good of the Party. However, Lenin's myopic focus on revolution and Party was not clearly inconsistent with Marx's writings. As Leszek Kołakowski (1978b, 383) has noted, Lenin may have been even more faithful to Marx's theory of historical materialism than Marx himself was.

Stalin's conception of 'Marxism–Leninism' was for the most part a 'perfection' of Lenin's principle of the Party-above-all; his dictatorial rule was the logical conclusion and ultimate manifestation of the totalitarian system Lenin conceived. It was a short and direct trip down the road of 'democratic centralism' from Lenin's conception of Party infallibility to Stalin's 'cult of personality.'⁶ Stalin's Marxism was both an ideology and the antithesis of ideology. Under his rule, 'Marxism' came to mean 'nothing more or less than the current pronouncement of the authority in question, that is, Stalin himself' (Kołakowski 1978c, 4). At the same time, Stalin institutionalized within the political-economic structures of socialism what

might be called the *architectural principles* of Marxism, as specified by Marx or derived from his writings by Lenin. These principles included ‘the workers’ state,’ ‘*nomenklatura*,’ ‘socialist democracy,’ ‘democratic centralism,’ ‘socialist legality,’ ‘central planning,’ ‘socialist property’ and ‘technological determinism.’ I address each of these institutions at various points in this book, as they relate to environmental protection. Together, they determined the design and function of the socialist system and its organizational units, and they continued to do so long after the ideology on which they were based had fallen into disrepute. It may be, as some have said, that no one in Poland, including the Communists, believed in Marxism after about 1970. But the institutions and organizations founded (rightly or wrongly) on his theories persisted.⁷

‘Socialism,’ in any case, is more than just an ideological label; it signifies ‘certain formations in existing societies’ (Kornai 1992a, 9). These formations share economic systems constructed on an administrative, rather than a market, model, which assumes social ownership and control of the means of production, and entails centralized resource allocation, with prices and production targets established by commands from above, rather than by demand from below. The formerly socialist countries of Eastern Europe all conformed to this model, albeit to different extents and with idiosyncratic variations. This book is about environmental protection within that model.

Socialist Legal Analysis

A cursory glance at the Table of Contents of this book might leave some traditional legal scholars scratching their heads in dismay. The book ostensibly is about environmental law and administration, but the majority of the chapters seem to be about subjects other than law, such as history, politics, economics and philosophy. Fortunately, legal scholars are no longer constrained to write about the law as if legislators, judges and lawyers operated within a social vacuum. I seriously doubt any legal scholar now living would be shocked to discover extensive treatments of history, politics and economics in a legal study. But there is a finer point to be made here concerning the nature of socialist law and legal studies. An examination of environmental law under socialism that restricted itself to narrowly doctrinal legal analysis would be thoroughly unilluminating because in the socialist system the law had no autonomy; it was little more than a manipulable set of politically and economically determined rules.⁸ The socialists viewed law as an instrument of social engineering; it was an integral and integrated part of the sociopolitical superstructure constructed upon the economic base of socialist society to support the aims of the ruling class and their vanguard party. Distinctions between law, politics and economics were blurred and sometimes obliterated. Consequently, in studying socialist law, political and economic conditions are at least as significant as literal statutory requirements.

This remains, however, a work of legal scholarship in a meaningful sense. Law and the legal system were central to the socialist regime for environmental protection. As I explain in Chapter 4 (§4.2), to the extent there was any meaningful environmental protection in People's Poland, it resulted from legislation and the enforcement of legal rules. But, as we shall see, the failure of environmental protection in People's Poland was not so much a *legal* failure as a wider systemic failure.

My law-oriented analysis distinguishes this book from earlier works on environmental protection under socialism, written predominantly by political scientists who have tended to treat law (if at all) as something peripheral or incidental to the subject. I do not mean to disparage their works, all of which have contributed significantly to our understanding of socialist environmental efforts and problems. I believe, however, that this book's law-oriented analysis fills a void. Paradoxically perhaps, my focus on environmental law and its *enforcement* may facilitate a more comprehensive analysis than earlier works have provided, for it must address *all* of the social and systemic forces that combined to render environmental protection efforts (such as they were) ineffectual.

The Parameters

The Communist Party ruled in Poland from the end of the World War II until 1989. This book will treat that entire time period and beyond. Chapter 2, which presents a history of Polish environmental law and administration, begins with pre-socialist environmental protection efforts. At the other end of the time line, Chapter 7 addresses the important systemic changes that have occurred since the fall of communism in 1989, and their implications for environmental protection in the democratic Republic of Poland. The analysis focuses, however, on the enactment, implementation and enforcement of the 1980 Environmental Protection and Development Act (1980 Dz.U. No. 3, item 6), People's Poland's first and only comprehensive environmental protection statute.

Dating the end of socialism in Poland is problematic because at least five different dates could be chosen. First, in December 1988 Poland's Parliament enacted a Law on Economic Activity (1988 Dz.U. No. 41, item 324) which, upon taking effect on January 1, 1989, freed most of the economy from central planning and centralized resources allocation. As I suggest in Chapter 7, this change may have been even more radical than the 'Balcerowicz Plan' of 'shock therapy' reforms that were introduced at the beginning of 1990. If the 1988 Law on Economic Activity did not, in itself, mark the end of socialism in Poland, it certainly marked the beginning of the end. Second, we might date the end of socialism to April 1989, when the Party/government signed the 'Round Table' accords with the previously outlawed Solidarity trade union. Those accords called, among other things, for free elections, which led directly to the demise of Communist

Party rule. Third, the elections themselves, which were held in July 1989, might be taken to date the end of the Communist era in Poland. Despite the fact that the ‘Round Table’ accords reserved 65 percent of seats in the *Sejm* (the lower house of Poland’s Parliament) to members of the Polish Communist Party (*Polska Zjednoczona Partia Robotnicza* or PZPR), the elections constituted a public referendum on Party rule in Poland. Solidarity-backed candidates won every seat open to them (except for one seat, which won by an independent candidate), placing the outcome of the referendum beyond dispute. Still, the Communists held on to power for a few months following the elections. Fourth, the Communist era in Poland could be said to have ended when the first post-Communist government of Prime Minister Tadeusz Mazowiecki took office in September 1989. Shortly after that, the PZPR dissolved itself. Even then (as I suggested earlier), many institutions of the socialist system remained in place. The final plausible date for the end of the Communist era in Poland would be January 1, 1990, the date the ‘Balcerowicz Plan’ (named for Mazowiecki’s Vice-Premier and Finance Minister Leszek Balcerowicz) of economic reforms took effect.

For purposes of this book, socialism is treated as if it ended on the final day of 1988 (the day before the 1988 Law on Economic Activity took effect). This selection makes the most sense from the perspective of environmental protection, where only few and mostly minor changes were introduced between 1985 and the end of 1988, but a good deal of legislative and administrative activity ensued in 1989.

A Road Map to the Analysis

Chapter 1 begins the book with a description of Poland’s ecological crisis *circa* 1988. That crisis signified a failure of environmental protection under socialism. Chapter 2 then presents a history of environmental law and administration in Poland, which demonstrates that the failure of environmental protection in People’s Poland was not a matter of benign neglect or malign intent. The Polish Party/state undertook serious efforts to design and implement stringent environmental policies. But, as the story of environmental devastation presented in Chapter 1 illustrates, those efforts all failed. Chapters 3–6 seek to explain that failure. Chapter 3 focuses on problems in the laws themselves, including ambiguous legal mandates, lax standards, weak penalties and discretionary exceptions from liability. I consider these to be problems of law *enforceability*, as distinct from problems of law *enforcement*, which relate to exogenous political and economic considerations. Chapter 3 concludes that, despite certain problems, Poland’s environmental laws were not the primary cause of the failure of environmental protection. The laws certainly might have been better drafted, for instance to be less ambiguous, but they were not patently unenforceable; they might have been more effectively enforced to provide greater environmental protection.

The primary cause of the failure of environmental protection under socialism was the chronic underenforcement of environmental laws. Chapters 4 and 5 investigate the political and economic causes, respectively, of that underenforcement. In Chapter 4, the focus is on four interrelated political impediments to environmental protection in the 'rule of Party' state: (1) the continual friction between the needs of environmental protection and certain *legitimacy principles*, such as the commitment to full employment and maximal production, that served to justify Party rule; (2) the structure of the Party/state's administrative hierarchy which provided leverage to industrial ministers and economic planners over environmental protection officials; (3) the structure of law enforcement and the judicial system in the Party/state, especially the broad discretion of prosecutors and the relative incompetence of environmental investigators; and (4) the Party/state's control over, and manipulation of, environmental information. Those political impediments to environmental law enforcement were complemented by structural impediments in the socialist economic system, addressed in Chapter 5, most notably the lack of scarcity pricing for natural resources (under the influence of Marx's labor theory of value), which obstructed conservation efforts, and the socialist property rights system, which created an endemic conflict of interest for the Party/state as environmental regulator and nominal owner of regulated industries. That regulatory conflict of interest led the Party/state to soften budget and law constraints on enterprises, reducing the overall effectiveness of environmental fees and fines.

Many of the systemic impediments to effective environmental protection discussed in Chapters 3–5 had roots in so-called 'orthodox' (or 'classical') Marxist theory. Chapter 6 examines elements of that theory with implications for environmental protection, including (1) the Marxist–Leninist attitude toward nature, (2) the conception of socialist property, (3) Marx's labor theory of value, and (4) the Marxist–Leninist conceptions of state and law. Regardless of whether Marx was in any way 'responsible' for the implementation of his ideas in the former Soviet Bloc, the point remains that orthodox Marxist theory is fundamentally incompatible with environmentalism; and, as a matter of fact, the institutions and organizations Marxist theory gave rise to (with or without Marx's approval) under Soviet-style communism impeded effective environmental protection. The normative implications of this for neo- and post-Marxist theories of socialism are addressed, along with other implications of the analysis, in Chapter 8.

The analysis in Chapters 3–6 suggests that features of the socialist system and even elements of Marxist theory are to blame for the poor environmental performance of People's Poland (among other former Soviet bloc countries). If so, we might reasonably expect Poland's environmental performance to improve once those institutions were eliminated or substantially altered. Chapter 7, which examines environmental protection in post-Communist Poland, confirms that expectation. Poland's environmental performance has improved dramatically since 1989, and much of that improvement is due to systemic reforms that have,

among other things, hardened budget constraints on polluters and reduced the state's regulatory conflict of interest, resulting in more active and effective environmental law enforcement.

In light of that analysis, Chapter 8 adduces some normative implications for an institutional theory of (effective) environmental protection. Specifically, I outline three institutions that Poland's case suggests may be necessary (though, perhaps, not sufficient) for effective environmental protection: (1) a property rights structure that minimizes regulatory conflicts of interest by disaggregating the interests of polluters and government regulators; (2) a pricing mechanism that values resource scarcity, thereby inducing economic actors to conservation; and (3) an institutionalized rule of law ideology to support environmental regulation. To the extent these are truly institutional prerequisites for effective environmental protection, they raise serious issues for environmental protection under any form of neo- or post-Marxist socialism. They may even signify what Lewis (1992) calls a 'capitalist imperative' for environmental protection.

Notes

1. As stated in a report by the Czech Republic Ministry of the Environment (Vavroušek 1990, 15), 'the official ideology . . . held for a long time that nothing like a polluted environment can exist under socialism.'

2. Indeed, in the late 1980s the heavily polluted city of Kraków, Poland, received approximately 20 percent less sunlight than other parts of the country (see *Reuters North European Service*, August 23, 1985).

3. Chapter 1 presents a more complete and detailed picture of Poland's crisis at the end of the Communist era.

4. In *The Civil War in France* (1940, 61), Marx wrote that in the socialist system 'united cooperative societies are to regulate national production under a common plan; thus taking it under their own control, and putting an end to the constant anarchy and periodical convulsions which are the fatality of capitalist production.' Marx certainly seems to have in mind here precisely the kind of central planning system that Lenin institutionalized, rather than some more Utopian conception of unalienated people organizing their lives together in peace, harmony and goodwill.

5. Marx and Engels (1978, 484) wrote that 'the theory of communism may be summed up in a single sentence: Abolition of private property.' State control over property was also implicit in Marx's call for a planned economy; after all, the state could not effectively plan economic relations if it did not control property.

6. Kołakowski (1978c, 4) draws the connection from Marx's epistemology through Lenin to Stalin this way: 'trust = the proletarian world-view = Marxism = the party's world-view = the pronouncement of the party leadership = those of the supreme leader.'

7. I have much more to say about the relationship between Marx's writings and socialist institutions relating to environmental protection in Chapter 6.

8. In effect, socialist legal theorists were operating at the opposite end of a single continuum from traditional (Langdellian) American legal scholars. Where American legal

scholars traditionally treated law as a thoroughly autonomous discipline, completely ignoring its political and economic content, socialist legal scholars treated law as if there were nothing more to it than political and economic content. Few legal scholars today would subscribe to either view of law. Most have come to recognize that the law contains substantial political and economic content, but that it is not wholly reducible to politics and economics. I take up the subject of socialist law and legality in detail in later chapters, especially in Chapters 4 (§4.2) and 6 (§6.5).

Chapter 1

POLAND'S ECOLOGICAL CRISIS

Wokulski reached the Vistula bank, and looked about in surprise. Here, occupying several acres of space, was a hill of the most hideous garbage, stinking, almost moving under the sun, while only a few dozen yards away lay the reservoirs from which Warsaw drank.

'Here,' he thought, 'is the center of all infection. What a man throws out of his house today he drinks tomorrow. Later he's moved to the Powazki cemetery, and then again from the other side of the city he infects those of his dear ones who are still alive. . . . A boulevard here, drains and water from the hill-top—several thousand people could be saved from death, and tens of thousands from diseases. . . . Not much work, but an inestimable profit; nature would know how to compensate for it.'

Bolesław Prus, *Lalka* ([1890] 1972)

1.1. Pollution and Communism in Poland

Poland suffered from pollution before it suffered communism. In the late nineteenth century, like most other European capitals,¹ Warsaw struggled with the combined environmental effects of rapid population growth and industrial development. Prus's dreary description of unsanitary conditions in Warsaw resembles nothing so much as Friedrich Engels' earlier descriptions of London's working-class boroughs (1958, 64–5).² The most that can be said about Poland's environmental problems in the era before communism is that they were little better, but no worse, than those of most other countries in Europe.³

Although the Communists did not invent pollution in Poland, they may be said to have perfected it. By the 1980s some were calling Poland the most polluted country in the world (see, e.g., *UPI*, Feb. 9, 1986 and Sept. 13, 1986). During the four-plus decades of Communist rule, industrial development and full employment were virtually exclusive priorities; environmental problems, at least initially, were ignored. This neglect was rational because, according to social-

ist theory, pollution was a phenomenon of industrial capitalism that would simply vanish once the means of production were brought under social ownership and central socioeconomic planning (see Zweigert and Gessner 1976; Fullenbach 1981; Kabala 1985). Meanwhile, air and water quality in People's Poland rapidly deteriorated. It did not take Poland's Communist rulers long to realize that socialism was not immune, after all, to environmental problems, and beginning in the 1960s they undertook substantial efforts to protect the environment; the Party made environmental protection a national priority and the legislature (Poland's *Sejm*) enacted stringent laws. Nevertheless, environmental problems proliferated. By 1989, when the Communists relinquished power, pollution posed a serious public health threat; according to some commentators the 'biological existence' of the Polish nation was in jeopardy (*Dagens Nyheter*, Jan. 28, 1982; Marcinkiewicz 1987, 42; Bochniarz and Bolan 1991, 337).

What follows is a verbal snapshot of the almost indescribable ecological conditions in People's Poland in the late 1980s, just before the fall of communism.⁴

1.2. Poland's Geography, Climate and Resource Base

Poland is East-Central Europe's largest country with a land area of 120,350 square miles (about half the size of Texas). It is a vast fertile plain running from Germany in the west to the republics of Lithuania, Belarus and Ukraine in the east. Its main river, the *Wisła* (Vistula), meanders the entire length of the country from the Tatras mountains on Poland's southern border with the Czech and Slovak Republics, through the historic capital of Kraków and the modern capital of Warsaw, to the Baltic Sea near Gdańsk.

Poland's natural resources base combines a unique mix of plenty and scarcity. The country is rich in mineral resources, including hard and brown coal, oil, natural gas, copper, zinc and lead ores, halite, phosphate and building stones, but water poor; among European countries, it ranks 20th in available water per capita (Ministry of Environmental Protection, Natural Resources and Forestry 1992, 8–9).⁵ In years of low rainfall, certain areas of the country, including Upper and Lower Silesia (in southwestern Poland), Łódź (in central Poland) and Lublin (in eastern Poland), suffer acute shortages of drinking water.⁶ Forests, predominantly coniferous, cover about 28 percent of the country. They include the last remnant of the primeval European forest at Białowieża (in eastern Poland, bordering Belarus), which is home to more than 3,000 plant and 8,500 animal species, including rare mammals like the European bison. All told, Poland provides habitat for 30 percent of Europe's mammals, 16 percent of its bird species, and 40 percent of its higher plants. And as a lowland country, subject to the influence of both continental and oceanic climates, Poland is especially inviting to many migratory species (see *PAP Polish Press Agency*, Aug. 28, 1992).

During its brief period of independence between the wars, Poland was a predominantly agricultural country with a widely dispersed populous. After World War II, it developed rapidly (pursuant to Soviet industrial policy) into one of the most industrialized countries in the world. By the late 1980s, 61 percent of its 38 million inhabitants lived in the major industrial centers of Warsaw, Kraków, Katowice, Gdańsk, Łódź, Szczecin and Wrocław. And half of that number were imperiled by severe air and water pollution.

1.3. Ecological Danger Zones

In 1983, Poland's Communist government listed 27 official 'ecological danger zones,' encompassing 11 percent of the nation's territory and 35 percent of its citizens (*UPI*, Feb. 9, 1986). The worst of these danger zones were in southern Poland, in the neighboring voivodships (administrative regions) of Katowice (in the area historically known as Silesia or *Śląsk*) and Kraków (in western Galicia or *Małopolska*). Katowice is Poland's largest industrial province. Though it comprises only 3 percent of Poland's land area, it is home to more than 10 percent of the nation's people, and its 1,700 industries, mining operations and other enterprises generate almost a third of the country's total annual income (see Hinrichsen 1987, 14). The region coincidentally produces an immense share of Poland's pollution. Forty miles to the east of Katowice and Poland's industrial heartland lies Poland's jewel, Kraków, the medieval city of kings. In 1978, the United Nations declared Kraków (Poland's third-largest city with a population of over 700,000) a World Heritage Site to be preserved as a cultural treasure for all mankind (Hinrichsen 1987, 13). Founded in the eleventh century, Kraków served as Poland's capital for nearly 500 years (until 1596). Its Jagiellonian University, established in the fourteenth century, is Eastern Europe's second oldest (after Prague), and its town square is among the largest in all of Europe. The quantity and quality of its Gothic and Renaissance architecture rival those of Italian cities. In the words of Czesław Miłosz (1983, 353), Poland's Nobel Prize winning poet, Kraków is 'one solid museum.' Indeed, it was 'solid' enough to survive World War II virtually unscathed, but by the 1970s it was literally dissolving in acid rain. Kraków sits in a damp valley in south-central Poland, with Katowice to the west, the Tatras Mountains to the south, and the huge Lenin Steelworks in neighboring Nowa Huta ('New Steelworks') to the northeast. In the late 1980s, about 50 percent of Kraków's air pollution was home grown; the rest was carried on the prevailing winds from Katowice, Czechoslovakia and East Germany (Fura 1985, 4; *Reuters North European Service*, June 20, 1985). Airborne chemicals lingered in the stagnant, humid air above Kraków until the rains carried them to earth, turning the city, in the words of one Polish scientist, into a virtual 'chemical cauldron' (quoted in Hinrichsen 1987, 14).

1.4. Sources of Pollution in Poland

Pollution in People's Poland primarily came from four sources: (1) industry; (2) mining operations; (3) inadequate sewage treatment; and (4) agricultural chemical runoff.

Industrial Pollution

Industry was the largest source of pollution in Kraków and throughout People's Poland, producing 65 percent of the nation's air effluents. Transportation yielded most of the other 35 percent.⁷ The vast majority of Poland's industries ran on domestically mined, high-sulphur coal, which supplied fully 80 percent of Poland's energy. Oil and natural gas imports from the Soviet Union and domestic small-scale hydropower development made up most of the remaining 20 percent (see Kabala 1985, 10). Unfortunately, fewer than 10 percent of Poland's 1,362 major industrial facilities had any kind of pollution-control equipment (Bochniarz and Bolan 1991, 338). During the late 1980s, they emitted nearly 13 million tons per year of air pollutants, including 3.4 million tons of dust, 4.2 million tons of sulphur dioxide, 1.5 million tons of nitrogen oxides, and 3.2 million tons of carbon oxides (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 12, table 1). The majority of these emissions came from smokestacks in Silesia, where most of Poland's coal, a third of its coke, half its steel, and a third of its electricity were (and are) produced (Bochniarz and Bolan 1991, 338). Katowice's industries emitted five times more sulphur dioxide per square mile than the industrial belt of West Germany's Ruhr Valley, one of most heavily industrialized, and highest polluting, areas in Western Europe (Hinrichsen 1987, 14). Nationwide, Polish industries emitted up to 4 million metric tons of sulphur dioxide each year, more than four times total US sulphur dioxide emissions per square mile (Kabala 1985, 11).⁸ And People's Poland was among the world leaders in carbon dioxide emissions, producing two to three times more per unit of national income than other countries with well-developed economies. In 1988, Polish industries emitted 457 million tons of carbon dioxide, accounting for 2.3 percent of the world total (*PAP Business News from Poland*, Aug. 28, 1992). Polish industries also emitted dusts containing heavy metals, including lead, cadmium, zinc, uranium and copper, which contaminated food and water supplies. In 1979, Kraków's huge Lenin Steelworks alone emitted dust containing 7 tons of cadmium, 170 tons of lead, 470 tons of zinc and 18,000 tons of iron (*UPI*, Feb. 9, 1986).⁹ Measurements of lead and cadmium taken from soil in the region were the highest ever recorded anywhere in the world, up to 200 times the maximum considered safe by the Polish government (Kabala 1985, 12; Hinrichsen 1987, 14).

In addition to air pollution, Poland's industries also produced tremendous quantities of solid wastes—more than 170 million tons and over 46 million cubic

meters per year. Only about 60 percent of those wastes were recycled; of the rest, approximately 1.5 percent was considered hazardous (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 21–3).

Pollution from Mining Operations

Coal mining created special environmental problems in People's Poland. In the effort to supply the nation's energy needs, miners continually pumped untreated, highly salinized water from coal pits into local rivers. Each year during the 1970s and 1980s, they dumped up to 9,000 tons of salts into Polish rivers, 'enough to fill 450 20 ton railway wagons' (Nowicki 1993, 23). The salts interfered with the process of water self-purification, caused river vessels and plants to corrode, and lowered the water table, causing area farmlands to dry up and subside. In the six years between 1975 and 1981, 300,000 parcels of land were destroyed by subsidence. Land in some places sank as much as 20 meters (about 70 feet). Mining operations also were responsible for about 40 percent of all industrial wastes produced and dumped in Poland (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 21). And old abandoned mining sites resembled lunar landscapes. Existing environmental regulations required that they be returned to pre-mining conditions, but reclamation activities proceeded at a snail's pace. By 1988, only 3,714 hectares (about 1,486 acres) had been reclaimed out of a total of 100,000 hectares (40,000 acres) where mining operations had been completed (Bochniarz and Bolan 1991, 338).

Inadequate Sewage Treatment

Poland's foremost ecological problem at the end of the Communist era was water quality (Kabala 1985, 9). The Wisła, which for centuries carried Polish products to the world, became a 'garbage carrier from Silesia to the Baltic Sea' (*UPI*, Feb. 9, 1986; also see *Daily Telegraph*, Nov. 18, 1989). Forty-four percent of Poland's 800 cities had no sewage treatment facilities (Nowicki 1993, 22), and 30 percent of Polish factories were not connected to a sewer system (*Przegląd Polski*, Sept. 14, 1989). Consequently, almost half of the more than 4 billion tons of sewage disgorged annually into Polish rivers was entirely untreated; and most of the rest was only partially treated (Ministry of Environmental Protection, Natural Resources and Forestry 1992, 16–17). Amazingly, until 1989 the nation's capital and largest city, Warsaw, had no sewage treatment facilities. Each day Warsaw's factories and residents dumped 1 million cubic meters of untreated sewage directly into the Wisła. When Warsaw's first sewage treatment plant finally opened in 1989 to serve about one-third of the city on the east bank of the Wisła, it had to be shut down almost immediately because of operating difficulties. It reopened in 1990.

Agricultural Chemical Runoff

For three decades the Polish Party/state sought to modernize agriculture in order to increase food production to meet the needs of the vast urban workforces spawned by its development programs. One aspect of modernization, the increased use of chemicals in farming, polluted every river in the country, as well as the Baltic coastline, with nitrogen and phosphorous-contaminated runoff. During the 1960s and 1970s, the Polish government attempted to reduce the surface runoff by burying pesticide wastes in concrete containers at special burial sites called *mogilniki*. More than 100,000 metric tons of pesticides, including more than 50,000 metric tons of highly toxic organochlorides, were buried in *mogilniki* around the country, with little or no regard for long-term environmental threats, including soil and groundwater contamination (*BNA International Environment Reporter*, Oct. 21, 1992).

1.5. The Environmental Consequences

The environmental consequences for Kraków of Poland's development policies were not different in kind from the experiences of American cities, such as Los Angeles or New York; it was simply a matter of degree. But differences in degree can be, and in Kraków's case were, profound.

Air Quality

Like Los Angeles, the city of Kraków (and hundreds of square miles around it), became blanketed with a veil of poisonous smog that exacerbated health problems and caused aesthetic blight (see *Daily Telegraph*, Nov. 18, 1989). But, unlike Los Angeles, the smog in Kraków often grew so dense that sunlight could not pierce it. In fact, Kraków received 20 percent less sunlight than other parts of Poland (*Reuters North European Service*, Aug. 23, 1985). Each day, water trucks would drive about the city, spraying the streets to keep the dust down (Timberlake 1981, 249). But the dust continued to fall at a rate of 550 tons per square kilometer, more than twice the maximum safe limit set by the Polish Party/government (*Przegląd Polski*, Sept. 14, 1989). Kraków's air was also filled with sulphur dioxide, nitrogen oxide and other gases, which fell to earth in the form of acid rain. The rain in and around Kraków was so acidic that it corroded railway tracks—trains passing through Silesia and western Galicia were not allowed to go more than 40 km per hour (25 mph) (Timberlake 1981, 249). The acid rain also inflicted tremendous damage on Kraków's historic legacy, its art and architecture. The great Wawel Castle, once the home of Poland's kings, was literally burned away at a rate of 2.5 millimeters per decade. The gold roof on Wawel Cathedral had to be completely

replaced after it was transformed into soluble chlorides by acid rain and fluorine gas, which combined to form a highly corrosive mixture of hydrochloric and hydrofluoric acids (Timberlake 1981, 249). Throughout Kraków, centuries-old statues lost their faces; steeples fell off churches; and, by 1989, 'the view down every street [was] disrupted by the scaffolding of workers trying to hold the buildings together' (Timberlake 1981, 249). According to one report from the late 1980s (*Radio Free Europe/Report on Eastern Europe*, Aug. 31, 1990), construction materials in Kraków decayed 40 times more rapidly than normal. All told, by the end of the Communist era 80 percent of Kraków's most valued buildings required immediate renovation (*UPI*, Feb. 6, 1986). In addition to the purely aesthetic costs of Kraków's rapid disintegration, the psychological effect on the Polish people was devastating. In the words of Dr. Piotr Gliński (conversation of Jan. 21, 1990), an environmental sociologist with the Polish Academy of Sciences, '[i]t hurt our feelings to watch the destruction of the nation's cultural identity.'

Air pollution also had an immense impact on agriculture in the Kraków area and throughout People's Poland. Fifty percent of Poland's forests were significantly damaged by exposure to air pollution and acid rain (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 33); in the area surrounding Kraków, 180,000 hectares (450,000 acres) of evergreen forests were reported to be dead or dying, and scientists predicted a loss of up to 3 million hectares (7.5 million acres) of trees over the next 20 years, at a cost of 120 billion zlotys (1.5 billion 1985 USD) (Kabala 1985, 12). The Nowa Huta Steelworks alone were responsible for killing more than 25 percent of the trees in the 11,000 hectare (27,500 acre) Niepołomicki Forest outside Kraków (Kabala 1985, 12). Area farmlands were in even worse shape. In 1980, the Polish Ecological Club recommended that 17 percent of Silesia's farmlands be taken out of production because of the dangerous build-up of heavy metals in the soil and on vegetation. On small farms near Kraków, '10 percent of the cattle suffer[ed] from fluorosis, and the farmers had to give up growing sugar beet because the leaves, used as fodder, poisoned livestock' (Timberlake 1981, 248–9). Vegetables grown in the area contained 2.4 times more uranium, 134 times more lead, 21 times more copper, 220 times more cadmium, and 165 times more zinc than 'normal' (*UPI*, Feb. 6, 1986). As a result, as much as 60 percent of all food produced in the Kraków area was deemed unfit for human consumption (Rosik-Dulewska et al. 1991, 22).

Although Kraków, Silesia and many other industrialized regions of People's Poland were heavily damaged by air pollution, it is important to realize that other parts of the country—most notably the northeast region—remained virtually unscathed by industrial development. According to a recent report by the Organization for Economic Co-Operation and Development, 27 percent of Poland's territory survived communism 'in natural or close to natural state' (OECD 1995, 88). This was due in part to Poland's system of central socioeconomic planning, which focused industrial development in highly populated urban areas. In 1980, for example, 600 of 931 plants considered 'especially harmful to the air' were

concentrated in 19 urban centers (*Wiadomości Statystyczne*, March 1980). Meanwhile, less densely populated regions, amounting to about 8.5 percent of Polish territory, were left almost entirely undeveloped. In addition, by 1989, 17 percent of Polish territory was under legal protection from development as national parks, nature reserves, landscape parks or areas of protected landscape (Nowicki 1993, 28). These areas preserved (and continue to preserve) natural assets that other European countries no longer possess (Żylicz 1995a, 65).

Water Quality

If that is possible, Kraków's water pollution problems were even worse than its air pollution problems. By the late 1980s, the stretch of the Wisła that flowed through the city was 'virtually devoid of biological life' (Kabala 1985, 9). Like more than 60 percent of the rivers in neighboring Katowice voivodship, this stretch was unfit for any use, except as a sewer. It was useless even for industrial purposes because the chemicals and metals in the water corroded machinery (W. Brzeziński 1974, 80–1). Water quality was little better throughout the rest of Poland. In 1989, the World Bank's Director of East European operations, Eugenio F. Laris, reported that 95 percent of Poland's drinking water was polluted (*New York Times*, Dec. 12, 1989). And 70 percent of the water supply posed an immediate threat to human health (*Przegląd Polski*, Sept. 14, 1989). Nationwide, more than 40 percent of river water was too polluted for any use (Kabala 1985, 9); for 60 percent of its length, the Wisła river was so polluted that it could not be used even for industrial purposes (*Kurier Polski*, Apr. 23, 1979). In addition, 300 of Poland's 500 larger lakes were endangered by municipal and agricultural wastes (Bochniarz and Bolan 1991, 337). Twenty percent of Poland's groundwater supply was estimated to be contaminated by pesticide residues leaching from chemical burial sites around the country; surveys taken at several sites detected concentrations of toxic compounds in groundwaters that exceeded European Community standards by 1,500 times. In the words of one Dutch researcher, these pesticide cemeteries were (and remain) 'chemical time bombs' (quoted in *BNA International Environment Reporter*, Oct. 21, 1992).

With Poland's rivers so highly polluted, it is no surprise to find that their ultimate destination, the Baltic Sea, was also severely degraded. The Baltic was (and is) 'one of the most heavily trafficked and polluted bodies of water in the world' (Kabala 1985, 10). According to official government statistics from the late 1980s, Polish rivers carried about 4.1 billion cubic meters of waste to the Baltic each year (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 16). As a consequence, Poland's Baltic coast was virtually unusable for recreation. Some summers, up to 27 miles of the most popular beaches along the Baltic were closed because chemicals in the water caused severe skin infections (*Reuters North European Service*, Aug. 23, 1985). Indeed, according

to a 1981 report appearing in the newspaper *Głos Robotniczy* (May 7, 1981), '[a] bacteriological and epidemiological threat exist[ed] in the bay's entire area.'

Health Consequences

The health effects of Poland's pollution extended far inland from the Baltic Sea coast. In the late 1980s, the physical and mental health of almost every Pole was threatened by pollution-related diseases and conditions. The effects were most pronounced in the highly industrialized regions of Kraków and Katowice.

In 1990, the average Pole could expect to live to age 71 or 72;¹⁰ and in the more heavily polluted regions of Silesia and western Galicia, life expectancy was a full two years lower (Jonderko 1990, 8, table 1). By contrast, life expectancy in the former West Germany and the United States averages between 74 and 76 years. In the years preceding the fall of communism in Poland, 70 percent of Silesians and Krakovians lived in health-threatening conditions. They suffered from '15 percent more disease of the circulation, 30 percent more tumors and 47 percent more respiratory disease than other Poles' (Timberlake 1981, 248). The cancer rate was 30 percent higher than the national average (*Reuters North European Service*, Aug. 23, 1985).¹¹ Twenty-four percent of Poland's occupational illnesses occurred in Kraków (*Daily Telegraph*, June 17, 1990). And inhabitants of Kraków and Katowice suffered comparatively high rates of heart defects, pneumonia, premature births and miscarriages (*Przegląd Polski*, Sept. 14, 1989; *Gazeta Wyborcza*, June 21, 1990). The miscarriages and premature births, in particular, were linked to chronic lead and cadmium exposure (Norska-Borówka et al. 1990, 49). For the country as a whole, some doctors were predicting that one Pole in four would contract some form of pollution-related cancer by the year 2000 (*Daily Telegraph*, June 17, 1990).¹²

Even more frightening were the statistics concerning the very youngest members of Polish society, who were most susceptible to pollution-caused diseases. At the end of the Communist era, infant mortality in Silesia was 17.6 per 1,000 live births, as compared with 16.1 for Poland as a whole, 7.7 in France and 5.8 in Sweden (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 38). Two-thirds of all Silesian children suffered by the age of ten from 'serious mental and physical disabilities' (*The Daily Telegraph*, Nov. 18, 1989). In all, some 60,000 Polish children suffered from pollution-related mental and/or physical disabilities (*Gazeta Wyborcza*, June 21, 1990). As if to underscore the correlation between pollution levels and disabilities, 54 of Poland's 102 schools for the disabled were located in Katowice (Timberlake 1981, 248). Indeed, the highest levels of infant mortality and the highest rate of respiratory tract diseases in children corresponded closely with the areas of the highest air and soil contamination in Silesia (Norska-Borówka et al. 1990, 49). For example, 300 children living close to a single metallurgical factory near Katowice were diagnosed with

clinical cases of lead poisoning (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 38). In overall physical and mental development, the children from Poland's industrial belt were two to three years behind children raised in areas remote from pollution sources (*Reuters Library Report*, May 20, 1988). Throughout Poland, the childhood leukemia rate doubled during the 1980s (*Daily Telegraph*, June 17, 1990).

Poland's ecological devastation also exacted a severe toll on the health and stability of many plant and animal species. Of 714 registered mammal, bird, reptile, amphibian and fish species in Poland, 15 became extinct, 41 were 'dying out' and 174 others were threatened (Ministry of Environmental Protection, Natural Resources and Forestry 1992b, 33). Only 10 percent of Poland's 430 native (and non-migrating) vertebrate species were *not* endangered (Bochniarz and Bolan 1991, 339).

These statistics, grim as they are, do not begin to paint a complete picture of the unlivable living conditions in some parts of Silesia and western Galicia in the final years of People's Poland. During the late 1980s, residents of Kraków suffering from respiratory ailments took refuge in salt mines. Each day, hundreds of men, women and children descended 650 feet below the earth's surface because it was the only place near Kraków with air clean enough to breathe deeply (see *New York Times*, Apr. 8, 1990). The air pollution in Katowice grew so severe at one point that the regional government actually considered issuing gas masks to hundreds of thousands of area residents (see *Chicago Tribune*, July 24, 1990). And whenever the rains fell in southern Poland, everything literally turned to black—the sky, the streets, even the people.

Economic Consequences

The environmental and health effects of pollution in Poland entailed enormous economic costs, though quantifying those costs is enormously tricky. A great deal depends on the factors and criteria economists select to calculate.¹³ Economic costs from environmental degradation can include, among others, pollution damages to infrastructure (plants, machinery, transportation and communications systems, etc.), increased health care costs and lost worker-hours resulting from pollution-caused illnesses, lowered standards of living, and depletion of the country's natural resource base. On any standard, the economic consequences of Poland's ecological destruction were severe. A 1987 government study set the environmental price tag at 800 billion zlotys per year (approximately 3.4 billion 1987 USD) (*Radio Free Europe/Report on Eastern Europe*, Oct. 5, 1990). That study, along with several others that were conducted in Poland between 1986 and 1990, were synthesized by Professor Antoni Symonowicz, under auspices of the Polish Ministry of Environmental Protection, Natural Resources and Forestry (Ministry of Environmental Protection, Natural Resources and Forestry 1992b

Table 1.1. Percentage share of environmental costs by sector

<i>Sector</i>	<i>Percentage share of environmental costs</i>
Agriculture ^a	28
Forestry	11
Corrosion	32
Natural resource management	10
Mining damage	2
Human health	7
Other losses ^b	10

^a Including losses due to reductions in arable acreage, crop yields and fish stocks.

^b Including losses due to diminished water self-purification capacity, environmental impacts of tourism, and effects of noise pollution.

Source: Ministry of Environmental Protection, Natural Resources and Forestry (1992b, 41–2).

40–3). Symonowicz's findings confirmed that environmental losses during the 1980s cost the Polish economy approximately 10 percent of annual gross national income (see Famielec et al. 1991, 44).¹⁴ Professor Symonowicz was able to attribute 46 percent of these losses to air pollution, 39 percent to land degradation and 15 percent to water pollution. Table 1.1 allocates the pollution costs by sector.

These ecological damage figures do not include the costs of the tremendous ecological damage that the Soviet Red Army inflicted during the four decades it maintained bases in Poland. According to Poland's State Environmental Inspectorate, the Red Army contaminated groundwater with petroleum-derived products, set thousands of acres of forests ablaze during training exercises, and dumped chemical, industrial and sewage wastes in industrial landfills. After 18 months of inspections, covering all 173,000 acres of 59 former Red Army sites in Poland, the Inspectorate estimated the total losses at 52.2 trillion (old) zlotys (about 2.5 billion 1994 USD) (*PAP News Wire*, Aug. 3, 1994), an amount equal to 8.4 percent of Poland's 1994 budget (*BBC Summary of World Broadcasts*, May 5, 1994).

The enormous economic and non-economic costs of environmental degradation in People's Poland describe an ecological crisis unmatched in world history, except perhaps by other countries of the former Soviet Bloc. The purpose of this book is to explain the systemic causes of that crisis, causes rooted in the socialist economic system, in the totalitarian political structures of communism, and in the ideological principles of orthodox Marxism. Contrary to conventional understanding, the crisis was not caused by simple neglect or malign intent. In fact, as the next chapter shows, successive governments in People's Poland undertook serious, if thoroughly unsuccessful efforts, to protect the environment.

Notes

1. Warsaw was not, strictly speaking, a European capital at the time Prus penned *Lalka*. Poland had been partitioned in 1795 by Russia, Prussia and Austria/Hungary, and Warsaw came under Russian rule. Poland did not regain its independence until after World War I.

2. On Engels' attitude toward nature, see Chapter 6 (§6.2).

3. On pre-Communist environmental protection efforts in Poland, see Chapter 2 (§2.1).

4. Environmental conditions in Poland have improved remarkably since 1989. Those improvements are discussed and explained in Chapter 7.

5. According to another report, Poland ranks 22nd among European countries in per capita water availability (*PAP Polish Press Agency*, Aug. 28, 1992).

6. This problem was exacerbated during the Communist era by the low prices charged for water use and consumption, which resulted in waste and insufficient investment in water supply system maintenance (see *PAP Polish Press Agency*, Aug. 28, 1992). On the relationship between natural resources pricing and environmental protection under socialism, see Chapter 5 (§5.4).

7. The Polish government has published annual pollution statistics since the early 1970s. I have relied heavily on the annual statistical surveys for 1989 and 1990 (GUS 1990, 1991). In subsequent textual citations and footnotes, I refer predominantly to secondary sources, including periodicals, which, during the 1970s and 1980s, provided a good deal of information that was unavailable from official sources. Two secondary sources in particular (Nowicki 1993 and Carter 1993) provide excellent overviews of Poland's environmental problems at the end of the Communist era.

On the relative allocation of air pollution emissions between industry and transportation, see Fura (1985, 4). In addition, coal-fired furnaces used for heating houses and apartments were an important source of pollution in places like the Stare Miasto (Old Town) section of Kraków. An estimated 230,000 stoves and 1,200 small boiler houses were used to heat the apartments of Kraków. In winter, these sources helped to bring sulphur dioxide concentrations in the old city to 3 to 4 milligrams per cubic meter, the highest in Poland (Ministry of Environmental Protection, Natural Resources and Forestry 1992a, 16; also see Hughes 1990, 153).

8. In absolute terms, American industries emit far more sulphur dioxide into the atmosphere—23 million tons (about 21 metric tons) in 1990—than Poland. However, the United States is 30 times larger than Poland and has 6.5 times more inhabitants.

9. Emissions from Nowa Huta actually declined during the 1980s, however, after the plant switched to low-sulphur coal and because of Poland's decade-long economic downturn.

10. Broken down by gender, mean life expectancy in Poland was 75.1 years for women and 66.9 years for men.

11. To some extent, the geographical distribution of cancer in Poland can be explained by lifestyle choices (e.g., cigarette smoking), patterns of reproduction, and professions, all of which vary by region (see Zatoński and Tyczyński 1990). One study of the relationship between air pollution and lung cancer in Kraków concluded that cigarette smoking remained the single strongest predictor of lung cancer risk (Jędrychowski et al. 1990). Researchers, nevertheless, have found a positive statistical correlation between air pollu-

tion and lung cancer rates in Kraków, especially among older residents (Jędrychowski et al. 1990, 39).

12. It should be noted that 'pollution-related,' in this context, includes cigarette smoking, which remains something of a national pastime in Poland (conversation with Dr. Piotr Gliński, July 19, 1993).

13. For a survey of research on the economic costs of environmental degradation in Poland, and the methodological problems of calculating environmental damages, see Śleszyński (1995).

14. Other studies put the cost higher, between 13 and 21 percent of GNP. Significant discrepancies in cost estimates result from factor choices. For example, the studies with lower cost estimates of around 8–10 percent of GNP typically did not incorporate public health expenditures (see *Radio Free Europe/Report on Eastern Europe*, Oct. 5, 1990). I examine the economic costs of environmental degradation in People's Poland in more detail in Chapter 5 (§5.2).

Chapter 2

A HISTORY OF ENVIRONMENTAL LAW IN POLAND

The balance of this book seeks to explain the ecological crisis described in Chapter 1. One obvious, but inaccurate, explanation is that the Communists simply did not care about protecting the environment. There is a kernel of truth in that story: Party leaders initially assumed that pollution problems, as endemic features of capitalism, would simply disappear under scientific socialism (see Zweigert and Gessner 1976, 93). But once it became apparent that pollution problems could not be planned out of existence, the Party/state acted to protect the environment. Those efforts, while obviously unsuccessful, were substantial and appear to have been seriously intended.

What follows is a brief history of environmental law and administration in Poland from pre-socialist times to the end of the Communist era.¹ The history demonstrates that the failure of environmental protection in People's Poland cannot be attributed to simple neglect. On the contrary, Poland's Communist Party, the Polish United Worker's Party (*Polska Zjednoczona Partia Robotnicza* or PZPR), made environmental protection a national political priority and spurred substantial legislative efforts. But those efforts were hindered by legal, political, economic and ideological attributes of the (real) socialist system, which are treated, respectively, in Chapters 3–6. In the final analysis, the Party/state was unable to overcome systemic obstacles, many of which were created for its own preservation, to protect the environment.

2.1. Pre-Socialism

Just as pollution in Poland predated communism (see Chapter 1, §1.1), so did environmental protection. Polish legal historians trace environmental protection efforts to medieval statutes restricting hunting of foxes, bison and other animals.² But these were not, strictly speaking, 'nature protection' laws, designed to preserve species for their own sakes—it would be anachronistic to impute a naturalist or environmentalist intent to legislators of the tenth or fifteenth centuries. Early

hunting laws were intended to secure the King's property rights. Still, their practical significance should not be underestimated: today Poland is the only country in Europe where wild herds of bison still roam free. In addition to restricting hunting, Poland has for several hundred years regulated mineral extraction, timber harvesting and water use. Early sanitation laws regulated city sewer systems (Deja 1992). During the Partitions (the period 1795–1918, when Polish territories were divided under Russian, Prussian and Austrian rule), some Polish landowners took it upon themselves to preserve endangered species and a few unspoiled forests (Szafer 1973, 12–13). Their efforts notwithstanding, the modern history of Polish environmental protection realistically dates from the end of World War I, when Poland regained its independence.

In 1919, the newly reborn Polish state created a Provisional State Commission for Nature Protection (*Tymczasowa Państwowa Komisja Ochrony Przyrody*) within the Ministry of Religion and Public Education. Its purpose was advisory and educational, rather than regulatory. It advised the government on matters relating to nature protection, and promoted environmental awareness in the Polish educational system. The Commission influenced two important pieces of environmental legislation from the interwar period, the 1922 Water Law and the 1934 Nature Protection Act.

The 1922 Water Law (1922 Dziennik Ustaw [Dz.U.] No. 102, item 936) may be considered Poland's first environmental law, though its primary purpose was to regulate water *use*—always an important issue in water-poor Poland. The statute specified that all waters, except those already recognized as privately owned, belonged to the public (art. 2), and that all citizens had equal rights to use the waters 'in the ordinary way' without any kind of prior approval or permit (art. 21). However, the statute also included substantive provisions to protect water quality. The scope of these protections marks the 1922 statute as an early example of pollution control legislation.

The 1922 Water Law regulated the discharge of industrial effluent into water bodies. Any user wanting to discharge pollutants or waste water 'in excess of general usage' had to obtain prior approval from the appropriate administrative authority (art. 25). The administrator could issue a permit only if the proposed drainage was in the 'public interest,' as ambiguously defined in article 48 of the statute: if the administrator found that a proposed discharge would have a negative impact on water quality that could not be prevented by the installation of available and effective purification equipment, the administrator 'should' not permit it. This foreshadowed the technology-based standards that became a prominent feature of American environmental laws in the 1970s. If the administrator determined that a proposed discharge did not contravene the public interest, that is, the discharge would not be unduly harmful or could be purified with the use of existing technologies, a permit could be issued. The administrator then could require compensation for any resulting water pollution damage (art. 47, sec. 5 and art. 51, sec. 1) or assess a fee for the mere privilege of using the

public's waters for the 'non-ordinary' purpose of discharging effluents (art. 32). These fees and fines created, at least potentially, an incentive to conserve both water quality and quantity.

Too little information exists about the implementation of the 1922 Water Law to determine its actual impact on pollution discharges and water quality. Given the state of environmental science, enforcement capabilities and environmental awareness in the first decades of the twentieth century, its impact was probably quite limited. As commentators have noted (for instance, W. Brzeziński 1974, 87), the Act's ambiguous terminology provided administrators with substantial leeway to permit any amount of industrial discharges; the compensation and user fee provisions were discretionary. Despite these shortcomings, the 1922 Water Law was clearly a pollution control statute ahead of its time, and it remained in force until 1962, when it was replaced by a new and, in some respects, regressive water law (which is discussed later in this chapter, §2.3).

In 1925, the Provisional State Commission for Nature Protection was transformed into the State Council for Nature Protection (*Państwowa Rada Ochrony Przyrody* or PROP), a group that survived the destruction of the interwar republic, reappearing after World War II in People's Poland as an officially recognized (i.e., Party-approved), though nominally 'independent,' organization. Like its predecessor, PROP was a quasi-governmental agency organized within the Ministry of Religion and Public Education. From its headquarters in Kraków, the 22-member Council advised the government on environmental policy and drafted legislation. It also supervised the activities of branch units located in Lwów (today Lviv), Warsaw, Poznań, and Wilno (today Vilnius).

PROP greatly influenced the history of nature protection in Poland through its scientific, educational and legislative works. Between the wars, six national parks were established on the Council's plans. PROP also organized 180 nature reserves and inventoried approximately 4,500 natural monuments (Szafer 1973, 14–15). Under the influence of PROP and early conservationist writers such as Jan Gwalbert Pawlikowski (1927), the subject of nature conservation became a mandatory part of the secondary school curriculum in 1933, and nature conservation lectures became regular features at universities in Warsaw, Kraków and Poznań. Most importantly, PROP played a central role in drafting the 1934 Nature Protection Act (1934 Dz.U. No. 31, item 274).

The 1934 Act closely resembled nature protection legislation enacted in other European countries during the same decade. The law sought to protect natural areas of special scientific, aesthetic and historic value, as well as endangered species of animals and plants (see Szafer 1973, 14–15). Article 1 of the statute established a system for designating national parks: any area at least 300 hectares (approximately 740 acres) in size with special natural beauty or a wealth of rare natural features could be designated a national park by order (*dekret*) of the Council of Ministers. Article 2 prohibited activities that might damage protected areas or species, except as permitted by the appropriate state authorities.

Among other things, the law banned the use, alteration or contamination of protected ‘objects,’ prohibited the hunting or killing of protected animal species and prohibited the removal of protected plant species. These prohibitions applied on private as well as on public lands (see W. Brzeziński 1949, 7–8). Violators were subject to prison terms (art. 24) and fines (arts. 24 and 28), with proceeds earmarked for a special Nature Protection Fund (art. 15) created to finance a nature protection police force.

Unfortunately, the 1934 Nature Protection Act was never implemented. In the five years before Nazi Germany invaded Poland in 1939, only two implementing decrees were issued, and they concerned administrative housekeeping matters. Not only did state authorities fail to implement the law; they completely ignored its restrictions and prohibitions. For example, in 1936 the Polish government began a campaign to develop the tourism potential of the Tatras Mountains in southern Poland. As part of this effort, an aerial tramway was constructed in a protected area, in clear contravention of the 1934 Act. The entire membership of PROP resigned in protest. This suited the state authorities well enough; the government did not bother to appoint new members, and the Council simply was left unstaffed between 1936 and the end of World War II. PROP was not legally abolished, but for all practical purposes it no longer existed. The same might be said of Poland’s entire system of environmental protection.

During the Nazi occupation of World War II, nature protection obviously was not anyone’s concern. The rapacious German and Soviet armies, along with Polish civilians struggling to survive, felled whole forests, slaughtered protected animal species and decimated nature preserves. However, the war’s most significant effect on nature protection in Poland may not have been the damage inflicted on natural resources, but the loss of human lives. Many prominent leaders of Poland’s nature protection movement were among the millions of Polish Jews and tens of thousands of Polish *inteligencja* murdered by Hitler’s forces. Only ten of PROP’s pre-war members survived to attend the Council’s first post-war meeting in September 1945.

2.2. 1945–1960³

Nature protection activities resumed quickly after the war. The 1934 Nature Protection Act was still in force on paper, but it was considered a dead letter. That law had been based on a preservationist concept of nature protection that was no longer acceptable in post-war Poland. The Communist Party/state quickly came to own, by systematic expropriation, more than 85 percent of the forests (1944 Dz.U. No. 15, item 82; also see Radecki 1990a, 93), and it planned to manage these and other so-called ‘productive forces of nature’ rationally (i.e., economically), in accordance with Marxist–Leninist ideology. Since the pre-war Nature Protection Law did not provide for economic exploitation of natural

resources, a new nature protection statute was needed that would reflect the new dominant ideology. This was made clear at PROP's first post-war conference in 1945, in a speech by the Minister of Education, Czesław Wycech. Noting that nature protection was inextricably intertwined with the economic life of the country, Wycech stressed that economic exploitation of natural resources was vital to the nation's economic well-being. This sent a clear message to the traditionally preservation-oriented members of PROP. In a response designed to reassure the government and the ruling party, Władysław Szafer, chair of the conference, stated:

Because we, the nature protectors, were in the pre-war period sometimes unfairly accused of acting in opposition to the country's industrialization, I must declare now that we were never opposed to national needs for transportation or industry, and we will never object in the future. We think that our activity will be right in line with the government of the Polish People's Republic. (Quoted in Radecki 1990a, 94)

Although PROP's first post-war conference signaled a dangerous (from the point of view of environmental protection) change in focus from resource preservation to economic exploitation, it also provided some reason for optimism about the future of environmental protection in socialist Poland. The very fact that the new government paid any attention at all to issues of nature protection as it confronted the daunting task of reconstructing Poland's decimated infrastructure suggested that the Communist authorities might be more active protectors of the environment than earlier governments had been. A more specific cause for optimism was PROP's adoption at the 1945 conference of a resolution broadening the concept of nature protection to include entire ecosystems (see Radecki 1990a, 95; Sommer 1993a, 19). This resolution led ultimately to the enactment of new nature protection legislation in 1949.

Local government activities following the war also provided nature protection advocates with reason for hope. In Zakopane (south of Kraków in the Tatra Mountains), the People's Council (local legislature) appointed a committee for nature protection to prepare forest protection regulations. Meanwhile, the regional governor (*wojewoda*) of Poznań (in west-central Poland) published a general nature protection regulation. In fact, local regulation of nature protection became 'a universal practice in the first years of the Polish People's Republic' (Radecki 1990a, 97).

In the midst of all these hopeful developments, however, the Party/government issued a 1947 decree establishing central economic planning, which was silent on the issue of nature protection (1947 Dz.U. No. 64, item 373). This was an ominous signal that the Party/state would design and implement economic plans without regard for the natural environment. From the point of view of PROP and other nature protection advocates, this made quick enactment of new nature

protection legislation imperative. And within two years, the *Sejm* (Poland's parliament) enacted a new nature protection law.

The 1949 Nature Protection Act (1949 Dz.U. No. 25, item 180) closely resembled its 1934 predecessor but, in keeping with the resolutions adopted at the 1945 PROP conference, it expressly broadened the focus of nature protection from protecting individuals to preserving entire ecosystems (Sommer 1993a, 19); article 1 specified that the goal of the statute was to protect not only 'separate individuals' but also 'their complexes and communities.' Also in keeping with the 1945 PROP conference, the new law contained an implicit but unmistakable shift in philosophy reflecting the changed political-economic circumstances of the Polish state following World War II. Whereas the 1934 Nature Protection Act spoke only of resource protection, its 1949 replacement introduced 'rational use' as an equal goal.⁴ Under article 1 of the 1949 Act, the purposes of nature protection included 'preservation, restoration, and proper use' of nature. It is important to recognize that this did not reflect a uniquely socialistic approach to nature protection; it was equally consistent with the conservationist (in contrast to preservationist) approach to nature protection advocated by Theodore Roosevelt, Gifford Pinchot and the American Progressive Conservationists of the early twentieth century. It is also worth noting that article 1 of the 1949 Act called for the establishment of a general policy on environmental protection, though this mandate was not implemented before the 1960s.

Primary administrative responsibility under the 1949 Nature Protection Act was removed from the Ministry of Education to the economically oriented Forestry Ministry (art. 2, sec. 1; also see W. Brzeziński 1949, 4). However, article 9 of the statute enjoined the administrator to 'ensure that the management of natural resources is consistent with principles aimed at protecting and strengthening nature's creative powers.' The Forestry Ministry thus was responsible for preserving and, at the same time, exploiting forest resources (much like the United States Forest Service). In order to fulfill the nature protection mandate of article 9, the Forestry Minister was obligated to appoint a Chief Nature Conservator within the Forestry Ministry (art. 5, sec. 1); subordinate nature conservators were to be appointed to deal with regional nature protection issues (art. 5, sec. 2). At the local (*gmina*) level, the law required the local administrator (*starost*) to act through a state forest inspector or national park director (art. 5, sec. 3). Article 6 provided for the appointment, by the Forestry Minister, of regional committees for nature protection to serve as consulting agencies.

The 1949 Act specified an important administrative role for PROP, extending far beyond its quasi-governmental advisory and education role under the 1934 Act. According to article 9, section 2, of the 1949 Act, state authorities were 'obligated to consult with the State Council for Nature Protection on matters which could significantly affect the balance of nature.' This mandate was similar to the one the United States Congress enacted 20 years later in the National Environmental Policy Act (NEPA) (42 U.S.C. §§4321 et seq.),⁵ with PROP in the role

of the Council on Environmental Quality.⁶ However, this obligation may have amounted to very little since, under article 3, section 3, of the Nature Protection Act, the Minister of Forestry served *ex officio* as President of PROP. In effect, the statute's consultation mandate required the Minister of Forestry to consult himself on forestry matters.⁷ PROP's statutory role in the administrative process should not, however, be underestimated. It had the right to offer its opinion on draft laws, regulations and candidates for administrative positions. Any administrative orders issued without a prior opinion from PROP expired automatically after three months (see W. Brzeziński 1949, 6). But while PROP's opinion had to be sought, its opinions did not have to be followed; the Party/state authorities were always free to ignore or reject PROP's advice. In this regard, the 1949 Act was, again, quite similar to the American NEPA, which is a purely procedural law.

The 1949 Nature Protection Act provided four different legal categories for protecting natural resources: (1) natural monuments, defined as individual formations or groups of formations, could be initiated by regional authorities, that is, the regional governor or People's Council, and designated by court order (art. 11, secs. 1 and 12); (2) nature reserves (or sanctuaries), relatively small areas with natural features (including aesthetic considerations) worthy of protection, could be designated by regulation of the Forestry Minister (art. 11, sec. 2); (3) national parks could be established by the Council of Ministers⁸ in areas of special value to the public interest at least 500 hectares (1,235 acres) in size (art. 11, sec. 3); and (4) endangered species of plants and animals could be protected by order of the Forestry Ministry, in cooperation with the Minister of Agriculture and Land Reform and the Minister of Health (art. 11, sec. 4). Once areas or species were designated through one of these legal mechanisms, they were protected in accordance with article 18, which 'prohibited' activities, including hunting, fishing and development activities, that might harm protected species or pollute protected areas (art. 18, secs. 2, 3 and 6). In keeping with its broadened concept of ecosystem protection, the 1949 Act sought to protect the habitats of endangered plant and animal species, for example by prohibiting water pollution or changes in water courses in designated areas (art. 18, secs. 2 and 3). Criminal sanctions for violations of article 18 regulations were provided in chapter 7 of the Act (arts. 28–32). Knowing violators were subject to arrest, imprisonment for three months and fines of up to 150,000 zlotys (approximately 3,400 1980 USD) (art. 28). It should be noted that these sanctions were transplanted from the 1934 Nature Protection Act. One important difference, however, was that the 1949 Act did not continue the special Nature Protection Fund established under the 1934 Act to finance the enforcement of nature protection activities. Instead, all fines levied under the 1949 Act became general revenues of the State Treasury (Radecki 1990a, 107).

The Party/state's implementation of the 1949 Nature Protection Act was a mixed-bag of real achievements and utter disdain for statutory directives. Achievements included the appointment of regional nature conservators (1950 M.P. No. 1–132, item 1646), the formation of regional advisory committees for nature pro-

tection (1952 Dz.U. No. 16, item 99) and the establishment of a registry of natural monuments (1952 M.P. No. A–27, item 376). In addition, between 1949 and 1960, nine new national parks, a network of nature reserves and numerous natural monuments were designated (Radecki 1990a, 110). However, many of the statute's most important provisions were simply ignored. For example, the Forestry Minister never appointed the Chief Nature Conservator as mandated by article 9 of the 1949 Act. This left the regional nature conservators without any connection to central state authority, greatly limiting their potential effectiveness. What little independent authority they possessed was stripped in 1950, when the Communist Party/state curtailed local and regional autonomy in a new law designed to centralize regulatory decision making (1950 Dz.U. No. 14, item 130).

Although PROP was supposed to play an important procedural role in nature protection matters under the 1949 Act, it was in practice isolated from nature protection policy making. Almost before the ink was dry on the new statute, PROP members were notified that their organization's role under the statute had been abolished. Its advisory and educational functions were taken over by a new Nature Protection Committee of the Polish Academy of Knowledge (*Komitet Ochrony Przyrody Polskiej Akademii Umiejętności*).⁹ This 'reorganization' ('co-optation' may be a more appropriate expression) made sense given the Party/state's political-economic priorities. As Wojciech Radecki (1990a, 108) notes, '[t]here was no place in the new centralistic and increasingly bureaucratic administrative system for an independent, self-governing organization such as PROP.' As a result of PROP's disenfranchisement, the Forestry Minister never implemented the statutory provisions requiring government agencies to consult with PROP on matters relating to nature protection. His inaction, which also reflected the Forestry Ministry's own weak position in an administrative hierarchy dominated by industrial ministries, permitted the Party/state's industrialization plans to proceed unfettered by nature protection considerations.

Despite the proliferation of national parks and nature reserves between 1949 and 1960, the period was characterized mainly by the Polish Party/state's strong emphasis on natural resources development over nature protection (Radecki 1990a, 110). In the same year that the new Nature Protection Act took effect, Poland adopted wholesale the Soviet system of investment planning (see Montias 1962, 148), with its built-in bias toward heavy industrial development. From this point on, concern for economic development eclipsed nature protection considerations, as evidenced by the few nature protection regulations issued in the wake of the 1949 Act.

In 1952, the Polish government enacted a new hunting law designed primarily to protect state property from expropriation (1952 Dz.U. No. 44, item 300) and new endangered species regulations (1952 Dz.U. No. 45, item 307). Both of these enactments were based on the framework of the 1949 Nature Protection Act, but they took entirely different approaches to the issue of protection. Whereas the new hunting law focused on protecting state property rights in wild game against

expropriation, the endangered species regulation focused on preservation. In comparing the two laws and the penalties they provided for violations, it is clear that the Polish Party/state was far more interested in protecting its property interests than in preserving endangered species: a violation of the hunting law constituted a felony whereas killing an endangered species was only a misdemeanor. Thus, to borrow Wojciech Radecki's (1990a, 113) example, a poacher convicted of killing an endangered mountain hare was punished much less severely than a poacher found guilty of taking a common grey hare. The incentives created by these laws obviously were not geared toward species preservation, but they accurately reflected the Party/state's priorities.

Following the 1949 Nature Protection Act, the Party/state for the first time turned its attention to problems of pollution control. New water pollution discharge standards were issued in 1950 (1950 Dz.U. No. 41, item 371), but they unfortunately did not include effective enforcement provisions. Meanwhile, Poland's forced industrialization drive proceeded in accordance with central economic plans that contained absolutely no environmental protection conditions. This neglect led to increasing environmental degradation, which became the subject of studies and investigations as early as 1953 (see *Nowe Drogi*, July 1978). According to a 1956 report by the State Council for Nature Protection (1957), central economic plans permitted heavy industrial enterprises to be located without regard for environmental impacts, and industries were being allowed to dump raw sewage directly into receiving waters with impunity. As so often happened in the history of People's Poland, the environmental regulations that did exist were undermined by economic plans that had at least equal legal status, higher political priority and greater compliance incentives. When conflicts arose, the economic plans were sure to prevail over environmental requirements. Consequently, by the mid-1950s, water and air pollution reached alarming levels.

On January 1, 1957, a State Inspectorate for Water Protection (*Państwowa Inspekcja Ochrony Wód*) was established within the Ministry of Navigation (*Ministerstwo Żeglugi*).¹⁰ The Inspectorate became the chief water protection agency in the state apparatus. Its job was to ensure that industrial enterprises and municipalities complied with the provisions of the still lingering 1922 Water Law. According to critics, however, the Water Protection Inspectorate's sole concern was to protect water *quantities* for the sake of further industrial development; sanitation and nature protection considerations took a back seat (see Radecki 1990a, 114).

In May 1957, the Ministry of Navigation was transformed into the Ministry of Navigation and Water Management (*Ministerstwo Żeglugi i Gospodarki Wodnej*) (1957 Dz.U. No. 31, item 130). This new ministry became the chief administrative agency responsible for water resources management and protection in Poland. Its responsibilities included flood control, coastal zone management, long-term planning of water use and protection, management of municipal sewer systems, and water quality monitoring. For the first time in People's Poland, a departmental minister with a seat on the Council of Ministers had some

responsibility for environmental protection. Unfortunately, this did not portend the emergence of pollution control and nature protection as political priorities of the Party/state.

2.3. The 1960s

In 1960, three years after its creation, the Ministry of Navigation and Water Management was stripped of its environmental protection responsibilities and reconstituted as the Navigation Ministry. At the same time, a new Central Water Management Board (*Centralny Urząd Gospodarki Wodnej*) was created to take over the old ministry's environmental protection responsibilities. The new Board was instituted not as a ministry but as a lower-level government agency; its chief did not sit on the Council of Ministers (1960 Dz.U. No. 29, item 163). This constituted a political demotion of sorts for environmental protection, which, at least in theory, had been represented on the Council of Ministers between 1957 and 1960. As a 'central' but not 'supreme' organ of state administration, the Central Water Management Board was subordinated to higher ministerial departments. Nevertheless, it constituted the first central agency in the state with a distinct pollution control mandate. As such, its creation marked a turning-point in the history of environmental law in People's Poland (see Radecki 1990a, 116). Initially the responsibilities of the Central Water Management Board included all the non-navigation-related tasks exercised by the former Ministry of Navigation and Water Management. It prepared and administered long-term water management and protection plans. It also had legal authority, delegated by the Council of Ministers, to coordinate activities of other state agencies relating to water management. But conflicts arose whenever the Central Water Management Board attempted to impose conditions on water-use activities governed by other central and supreme Party/state organs. Industrial ministries in particular paid little attention to principles of environmental protection or to the Central Bureau.

Between 1960 and 1966, the Polish parliament was very active in the area of environmental protection. First, on January 31, 1961, the *Sejm* enacted a new Water Pollution Protection Act (1961 Dz.U. No. 5, item 33), which authorized the Council of Ministers to set norms for water pollution discharges. That same day, the *Sejm* enacted a land-use planning law that, among other things, expressly recognized the importance of natural resources, and established their protection as one of the purposes of land-use planning (1961 Dz.U. No. 7, item 47).

In May 1962, the Water Pollution Protection Act was subsumed by a new general Water Law that finally replaced the 1922 Water Law (1962 Dz.U. No. 34, item 158). More than anything else, the 1962 statute subjected the management and protection of water to central planning (arts. 22–24). Although certain provisions of the 1962 law ostensibly permitted state agencies to regulate pollution discharges 'independently' of the central plan (art. 88, sec. 2; also see Tarasiewicz

1965, 113–15), plan compliance alone determined whether or not a water-use permit would be issued (art. 46). The permitting agency (which was the ministry with jurisdiction over the particular development) was authorized to attach pollution control conditions to the permit, but the Central Water Management Board had no independent authority to do so (W. Brzeziński 1974, 91). Industrial ministers almost never exercised their authority to impose environmental conditions in permits; such conditions only added to the costs of construction and operation without providing any ‘productive’ benefits within the socialist accounting system (which is discussed in Chapter 5, §5.4). And if a permitting agency ever did impose water pollution conditions, compliance was not guaranteed. The permitting agency (or the Council of Ministers) *could* revoke the permit in case of a violation, but revocation was neither automatic nor mandatory. In extreme cases, violations of plan-based regulations or permit conditions could lead to criminal sanctions, including fines and imprisonment, under chapter 10 of the 1962 Water Law (arts. 151–160). But sanctions were rarely imposed for illegal discharges. Most cases were dropped by either the prosecutor or the court on a finding that the violations resulted from ‘activities dictated by higher reasons,’ namely fulfillment of plan production targets (W. Brzeziński 1974, 111).¹¹ It should be kept in mind that economic plans were also promulgated as legal acts; in virtually every case, compliance with planning mandates became a complete defense of violations of water pollution control laws.

The same problem plagued Poland’s first air pollution prevention law, which was enacted in 1966 (1966 Dz.U. No. 14, item 87). The Party’s newspaper, *Trybuna Ludu* (quoted in translation in Carter 1993, 122), referred to the 1966 Air Pollution Act as ‘the best formulated and most progressive law of this sort in the world.’ In reality, the law was virtually without normative content. It defined ‘air pollution’ as emissions of substances ‘which may result in violations of permissible concentrations in the air’ (art. 1, sec. 2). On this definition, air pollution could not exist in the absence of regulations defining permissible concentrations. And the 1966 Air Pollution Act did not require the Council of Ministers to promulgate ‘permissible concentrations.’ It only *enabled* the Council of Ministers and other state agencies to impose air pollution requirements and restrictions at their discretion. As it happened, the Council of Ministers did adopt fairly stringent norms for air pollution concentrations (1966 Dz.U., No. 42, item 253), but not because of any statutory mandate.¹² It retained authority to rescind or suspend the regulations at any time.

Once permissible concentrations were established, the 1966 Air Pollution Act was potentially enforceable. Article 3, section 1, expressly required new and expanding industrial facilities to install available emissions control equipment, if their uncontrolled emissions would or could cause a violation of permissible concentrations. However, it was left to the administrator’s discretion to demand pollution abatement (art. 11, sec. 1). If emissions posed an imminent threat to human life, the State Health Inspector could close down the industrial facility entirely

(art. 11, sec. 3). However, this kind of administrative authority over industrial production was only rarely exercised because of its potential effect on economic production. The Polish environmental law scholar Waław Brzeziński (1973, 87), writing about the 1966 statute, noted the ‘frequent collisions’ between air pollution prevention and production that administrators had to solve on a case-by-case basis ‘from the point of view of state policy.’ Thanks to the vast administrative discretion afforded by the 1966 Air Pollution Act, administrators could in every case decide that production concerns took priority over pollution control (see W. Brzeziński 1974, 129).

Administrative responsibilities under the 1966 Air Pollution Law were vested in a new Office of Air Pollution Control (*Biuro do Spraw Ochrony Powietrza Atmosferycznego*) established within the Central Water Management Board, which became, as a result, Poland’s first comprehensive environment agency (albeit with substantial economic responsibilities, for example for water management). The Central Board promulgated emissions standards under the 1966 Air Pollution Act and discharge standards under the 1962 Water Law. But under both laws it had trouble enforcing its authority against central and supreme organs of state authority. This foreshadowed a chronic problem for environmental protection in People’s Poland: the relative lack of authority of environmental ministries over industrial ministries (a problem discussed at length in Chapter 4, §4.3).

While the *Sejm* enacted new legislation, Poland’s Party/government also was active in environmental protection during the 1960s. The 1961 five-year socioeconomic plan, written by the Communist Party, adopted by the Council of Ministers and ratified by the parliament, for the first time included provisions concerning water and air pollution (see Bochniarz and Kassenberg 1988, 18). In the middle of the decade, the Council of Ministers exercised its independent regulatory authority, issuing rules to protect, respectively, forests and agricultural lands against air pollution (1966 M.P. No. 40, item 200; 1966 M.P. No. 50, item 247; 1970 M.P. No. 4, item 35). Of course, Council decrees and socioeconomic plans carried a lot more weight with industrial ministries than did environmental agency regulations, but they too went largely unenforced. From the 1960s to the end of the Communist era in Poland, lack of enforcement, more than lack of regulation or the poor quality of regulations, obstructed effective environmental protection.

In 1964, the State Council for Nature Protection attempted to reinvigorate the concept of nature preservation by designing new categories of protected areas, including landscape parks and areas of protected landscape. The Council ultimately sought to amend the 1949 Nature Protection Act, but its proposals were rejected summarily by the Party/government, which, by that time, was less interested in setting aside protected areas and more interested in reducing levels of pollution and waste (as evidenced by the two five-year socioeconomic plans for 1961–70). But in one respect, 1964 was a landmark year for environmental protection in People’s Poland. That year, the *Sejm* enacted a new Civil Code, which, for the first time, permitted individuals to bring lawsuits to stop or control

pollution (1964 Dz.U. No. 16, item 93).¹³ Under article 222 of the Code, property owners had the right to sue any person whose activities caused excessive property damage. In addition, a plaintiff could sue to preempt prospective harm (art. 439). These provisions remained potential sources of individual redress for environmental harm even after comprehensive environmental legislation was enacted in 1980. However, they were rarely utilized. Environmental lawsuits under the Civil Code were infrequent and, of those that were brought, relatively few were successful.

Finally, in 1969, a new Penal Code was adopted that provided criminal sanctions for specific environmental harms (1969 Dz.U. No. 13, item 94).¹⁴ Under this Code, individual persons (but not enterprises or organizations) could be fined or imprisoned for environmental crimes. Specified offenses included air-, water- and soil-polluting activities that endangered human life and health (art. 140) and illegal timber harvesting (art. 213). As with the Civil Code, few criminal cases were ever brought, and many complaints received by prosecutors were summarily dismissed for reasons of 'higher necessity' (see Biernat and Wasilewski 1992, 44).

2.4. The 1970s

It is somewhat of a misnomer to speak of 'environmental protection' in Poland before the 1970s. The concept of 'nature protection' had been well understood since the 1920s (see Pawlikowski 1927) and pollution threats had been taken seriously since the 1950s. But there was scant understanding before 1970 of how nature protection and pollution control fit together. This was not just a Polish problem, of course; throughout the world, the concept of 'environmental protection' was just beginning to be defined in the early 1970s.

Between 1971 and 1972, two important events facilitated the development of environmental protection in Poland. The first was the PZPR's Sixth Party Congress in 1971, where for the first time environmental protection emerged as a national political priority. In its resolution the Congress called for a complete program of environmental protection to be prepared within two or three years (*VI Zjazd PZPR. Podstawowe materiały i dokumenty*, 1972, 252). However, this proposed 'environmental' program was also to include, among other things, plans for a national network of superhighways. The second important event for the development of environmental protection in Poland was the United Nations Conference on the Human Environment held in Stockholm in 1972. This may seem odd since Poland did not actually attend the conference; it boycotted it, along with all the Soviet bloc countries, ostensibly because non-members of the UN were not invited to participate. However, the Polish government had prepared to attend, and those preparations greatly influenced the theory, if not the practice, of environmental protection in Poland. New scientific committees were appointed to study environmental problems, and scholars began to explore potential legal solu-

tions. In March 1971, the Polish Academy of Sciences (*Polska Akademia Nauk* or PAN) Scientific Committee 'Man and Environment' (*Komitet Naukowy 'Człowiek i Środowisko'*) convened a conference of lawyers from around the country to discuss the methods and goals of what was just beginning to be called 'environmental protection' (*ochrona środowiska*¹⁵). Before the close of 1971, the Scientific Committee issued a report entitled 'Programme of environmental protection in Poland to the year 1990.' The Presidium of the Council of Ministers and the Politburo of the PZPR's Central Committee adopted this report in 1975.

Meanwhile, member countries of the Soviet Bloc's Council for Mutual Economic Assistance (CMEA) began to cooperate more closely on matters of environmental protection. From the start of the 1970s, one sees a great deal of coordination in their environmental policies. New environmental legislation began appearing in each country at roughly the same time, and one country's environmental statutes began closely to resemble another's. However, Poland was a bit out of step (as it was in so many respects) with its 'fraternal allies.' Its environmental laws were distinctive and, in many ways, more sophisticated than those of other Soviet bloc countries (see Juergensmeyer et al. 1991, 832; Cummings 1993, 380).

Poland was poised at the start of the 1970s to pursue a fresh approach to problems of environmental protection. But almost immediately there were setbacks. The first was in 1972 when the Central Water Management Board proposed to transform itself into a new Ministry of Water Management and Environmental Protection (*Ministerstwo Gospodarki Wodnej i Ochrony Środowiska*) in order to give environmental protection a more prominent place in the agency's mission and to raise the status of the environmental agency to the ministerial level; the proposed change would have given environmental protection advocates a voice on the Council of Ministers for the first time since the late 1950s. Agricultural and industrial ministries objected to the change, which they correctly perceived as threatening their hegemony. And, as usual, the industrial interests prevailed. Not only was the Central Water Management Board's proposal rejected, but on March 29, 1972, the Board itself was abolished (1972 Dz.U. No. 11, item 79) and its various responsibilities were scattered among the Agriculture Ministry, the Navigation Ministry and a newly created Ministry of Local Economy and Environmental Protection (*Ministerstwo Gospodarki Terenowej i Ochrony Środowiska*) (1972 Dz.U. No. 11, item 77). This new ministry became responsible for city planning and development, urban land-use management, public utilities regulation, housing, property expropriation, and environmental protection of water, air and 'green areas' (*zieleni*) within cities and towns. Interestingly, the diffusion of environmental protection responsibilities, which appeared to constitute a political defeat for environmental protection interests, may have been purely coincidental: according to one former official of the Central Water Management Board, the administrative reform resulted from a personal vendetta against the Board's chief by other high-ranking Communist Party members (conversation with Andrzej Deja, Chief

of the Water Management Office, Ministry of Environmental Protection, Natural Resources and Forestry, June 9, 1992).

The 1972 reorganization of environmental protection administration was not the only administrative change during the 1970s. In 1975, the Ministry of Local Economy and Environmental Protection was replaced by the Ministry of Administration, Local Economy and Environmental Protection (*Ministerstwo Administracji, Gospodarki Terenowej i Ochrony Środowiska*) (1975 Dz.U. No 16, item 90). The addition to the title was significant. As Wojciech Radecki (1990a, 122) has noted, the new ministry's duties were predominantly administrative, with environmental protection responsibilities 'added as an afterthought.'

The 1970s was also a busy decade of substantive legislative and regulatory activity on environmental protection. In 1970, the Council of Ministers promulgated a regulation to protect forests from air pollution that required industrial enterprises to compensate for forest damage caused by their emissions (1970 M.P. No. 4, item 35). In addition, polluters could be forced to restore damaged forests to their pre-existing state. In 1971, this regulation was subsumed into a new law to protect agricultural and forest lands (1971 Dz.U. No. 27, item 249), which sought to promote conservation of productive agricultural lands by preventing their conversion to non-agricultural uses (except in cases of economic necessity), limiting soil erosion, reclaiming agriculture lands previously converted to industrial uses, and reducing waste in land use (see Stelmachowski 1984, 347–8).

The most significant new environmental statutes of the 1970s were the Water Law (1974 Dz.U. No. 38, item 230) and the Building Law (1974 Dz.U. No. 38, item 229), both enacted on October 24, 1974. The Building Law contained a special 'chapter' (*rozdział*) devoted to '[e]nvironmental protection in building construction.' Article 113, section 8, provided that buildings should be designed, built and used in such a way that ensured 'water, air soil, nature and landscape protection, as well as protection against noise, vibrations, radioactivity, and electromagnetic radiation.' The 1974 Water Law did not so much replace the 1962 Water Law, as consolidate it with other statutes regulating various aspects of water use. The 1974 Water Law more comprehensively treated all aspects of water management, including municipal and rural water supplies, irrigation and drainage (see Surowiec and Deja 1978, 1738). The main focus of water management remained the water supply, and the permitting process stayed much as it had been under the 1962 law. The 1974 Water Law did, however, make a substantial contribution to water quality protection by requiring the establishment of protective zones around water intakes (arts. 59–61) and authorizing the Council of Ministers to institute a classification system for water quality (art. 62, sec. 3). Most importantly, the 1974 Water Law created for the first time in People's Poland, and perhaps the world, a system of fees for water consumption and disposal. This was significant for a variety of environmental, economic and ideological reasons.¹⁶ The fees were to be set (by the Council of Ministers) at levels exceeding the cost of water treatment in order to encourage water conservation and reduce waste, and they were

to be paid into a Water Management Fund to finance water improvement and water quality protection projects (art. 56). Finally, the 1974 Water Law attempted to ensure greater compliance with its environmental requirements by beefing up criminal sanctions for violations. The financial penalties remained the same as under the 1962 Water Law (50,000 zlotys), but the possible term of imprisonment was increased from two to five years (art. 122).

Despite the new laws and changes in administration during the first half of the 1970s, the PZPR apparently was dissatisfied with the piecemeal approach to environmental protection. At its Seventh Party Congress in December 1975, the issue of environmental protection rose from third (in 1971) to first on the list of political priorities. The 1975 resolution stated:

We must give more attention than before to the protection and shaping of the environment. With this in view we must build our towns and villages and protect the aesthetic values of the countryside. This should be an important part of development planning, investment programming and technology preference. Taking into account the importance of the problem there should be prepared, with the help of scientists, a bill regulating environmental protection. (Quoted in Sommer 1988, 26–7)

The 1975 resolution ultimately led to passage of the 1980 Environmental Protection and Development Act. It is significant that the increased focus on environmental protection in Poland during the 1970s did not result from any particular catalytic event or grass-roots political movement. Rather, the impetus for increased environmental protection came from the highest echelons of the PZPR. Thus, claims that the Party did not concern itself with environmental protection are, at the least, exaggerated.

As if to codify the PZPR's 1975 resolution, the Polish Constitution was amended in 1976 (1976 Dz.U. No. 7, item 36) to include, among other new provisions, two articles raising environmental protection 'to the highest level of law and politics' (Radecki 1990a, 122):

Article 12, paragraph 2: The Polish People's Republic ensures the protection and rational shaping of the environment.

Article 71: Citizens of the Polish People's Republic have the right to utilize the values of the natural environment and the obligation to protect it.

It is unclear just what these provisions were intended to accomplish. As Jerzy Sommer (1988, 28–9) has pointed out, the very fact of their inclusion seemed to elevate environmental protection as 'one of the basic aims of the socialist state.' However, Professor Sommer (1988, 33) also recognized that '[t]he real significance' of the new constitutional provisions could not be determined before they were implemented through subordinate legislation. In People's Poland, as in all the

former Soviet bloc countries, constitutional provisions were not self-executing; they had to be given legal effect by parliamentary legislation (see Brzeziński and Garlicki 1995a, 24). Unless and until the *Sejm* enacted a law specifically implementing articles 12 and 71, the constitutional rights they supposedly guaranteed were, legally speaking, meaningless. Consequently, the provisions had no immediate impact on environmental protection in Poland. The real test of their legal meaning had to wait four years for the enactment of the 1980 Environmental Protection and Development Act. In the meantime, there was a great deal of conversation about what form new environmental legislation should take. Should it be comprehensive (as argued, for example, by Radecki 1978) or should nature protection be separated from pollution control (as argued by Łenkowa 1977 and Jastrzębski 1979a)? Should it be in the form of a code (like the Civil Code, for example), a general framework act with more specific legislation to be promulgated later, or something in between, such as an ‘omnibus’ act? As legal scholars (including Łustacz 1980) debated these questions, drafts of the new law were prepared, beginning in May 1976. The first draft bill combined all elements of environmental protection, including nature conservation; it would have replaced the 1949 Nature Protection Act. Subsequent drafts from March and April of 1976 and December 1977 refined the definition of ‘environment’ to make it more inclusive in some respects but less inclusive in others. These later drafts excluded nature protection, so as to maintain the 1949 Nature Protection Act.

In 1976, the Polish Academy of Sciences founded a Research Group on Environmental Law within its Institute of State and Law. This was the first officially established environmental law bureau in the Soviet bloc and, perhaps, the whole of Europe. It included many of Poland’s top environmental law scholars, including Jerzy Sommer, Wojciech Radecki and Jerzy Jendrośka. Over the years, they and their colleagues have published literally hundreds of books and thousands of articles in Polish, German, English and other languages about environmental law and administration. This record has earned them considerable respect and influence, especially since the fall of communism.

Despite the legislative and administrative efforts of the 1960s and 1970s, Poland’s pollution problems continued to mount. Air pollution emissions rose rapidly despite improvements in monitoring, the imposition of emissions limitations, the application of available emissions reduction technologies, and increased penalties (see *Aura*, Nov. 1979; *Gospodarko Planowa*, Mar. 1980; and *Wiadomości Statystyczne*, Dec. 1979). Water quality also deteriorated (see *Wiadomości Statystyczne*, Nov. 1979). In a resolution adopted on December 11, 1978, the State Council for Nature Protection concluded that industries habitually were ignoring both the harmful environmental impacts of their activities and ‘the need to respect binding law’ because government environmental programs were not being adequately implemented (*Nowe Drogi*, July 1980). For environmental protection advocates, this resolution underscored the urgent need for comprehensive new environmental legislation.

2.5. The 1980 Environmental Protection and Development Act

Structure and Definitions

On January 31, 1980, the *Sejm* enacted the new Environmental Protection and Development Act (EPDA) (1980 Dz.U. No. 3, item 6).¹⁷ Its title, '*Ustawa o ochronie i kształtowaniu środowiska*,'¹⁸ signified that its purpose was not only protection but economic use of the natural environment. The Act consisted of eight titles containing 118 articles:

- Title I: General provisions.
- Title II: Substantive provisions on air and water pollution, protecting 'green areas,' waste management, noise and radiation pollution.
- Title III: General directives on land use and development, forest management, public works construction, building and other potentially environmentally destructive economic practices.
- Title IV: Liability provisions with reference to the Penal Code, Civil Code and Code for Petty Offenses.
- Title V: Economic measures for environmental protection, including a schedule of fees for resource use and pollution charges to finance new state environmental protection funds.
- Title VI: Organization and administration of environmental protection.
- Title VII: Penal provisions.
- Title VIII: Transitional and final provisions.

The 1980 EPDA was a comprehensive statute designed to deal with the whole panoply of environmental media and their problems. Only specific nature protection responsibilities were excluded (art. 13, sec. 2; art. 35, sec. 1; and art. 39), thereby preserving the 1949 Nature Protection Act. Otherwise, the new Environmental Protection and Development Act blanketed the entire field of environmental protection. Article 1, section 2, defined 'environment' broadly to include 'the totality of natural elements, including the surface of the earth together with the minerals, water, air, flora and fauna, and the landscape as found in its natural state and as transformed by human activity.' In keeping with this broad definition, article 111 expressly preempted conflicting provisions of other resource-use statutes, including the 1974 Water Law, and economic statutes with environmental mandates, such as the 1974 Building Law.

The 1980 EPDA defined 'environmental protection' broadly enough to cover any activity having anything to do with nature and its resources, including all 'actions or restraints necessary to restore or maintain the balance of nature' (art. 2, sec. 1), which the Act defined as 'equilibrium in the reciprocal influences of people, the elements of living nature and the habitat conditions produced by elements of inanimate nature' (art. 3, sec. 1). This general definition was followed

by a list of four categories of environmental protection activities: (1) rational environmental ‘development,’ (2) rational natural resources management, (3) measures to prevent harmful environmental effects causing damage, destruction, pollution or changes in the physical features of character of its natural elements, and (4) restoration of natural elements to their proper state (art. 2, sec. 1). These categories clearly indicate that the 1980 EPDA’s focus was not preservationist; use and development of the environment also constituted a major part of ‘environmental protection,’ as the Act’s title suggested. The apparent conflict in the statute’s ultimate aims supposedly was minimized by language narrowly defining ‘rational use’ (*eksploatacja*) to cover only those uses consistent with both economic and extra-economic values, such as quality of life. Any decision to use natural resources was supposed not to diminish the quality of the environment (art. 2, sec. 2). However, this language was merely precatory. The phrase ‘quality of the environment’ is ambiguous, and most any ‘use,’ rational or otherwise, has some detrimental impact on environmental values. It certainly was not a well-defined *legal* test for determining whether development activities could proceed.

Environmental Protection and Central Planning

The most significant new features of the 1980 Environmental Protection and Development Act concerned the relationship between environmental protection and central economic planning. Before 1980, socioeconomic planners paid no attention to the environmental consequences of their decisions, and this obviously hampered protection efforts. The new law required socioeconomic plans to give due consideration to environmental protection:

Art. 5 sec. 1: Environmental protection constitutes an essential element of national socioeconomic policy. Matters pertaining to environmental protection shall be included in the national socioeconomic plans, land use plans, and normative statutes, and will be taken into account in the activities of national organs, national economic units and social organizations.

Art. 5, sec. 3: The national socioeconomic plans shall take into account, as an integral part of the planning provisions, tasks and means to ensure effective environmental protection and the effective elimination of activities with negative environmental impacts.

In addition, environmental protection considerations were to become an integral part of land-use plans that were the basis for development and investment location decisions. Under the 1980 EPDA, land-use plans had to ‘guarantee conditions for maintaining the balance of nature, rational economic management of natural resources and protection of landscape and climatic values’ (art. 6, sec. 2). Admin-

istrative decisions that violated land-use plan mandates were void automatically (art. 7, sec. 2).

Although these provisions undoubtedly constituted a significant and beneficial addition to the planning process, it is important to note that the new restrictions on socioeconomic planners were purely procedural. The 1980 EPDA did not shackle them with substantive environmental mandates, but required planners only to ‘consider’ environmental protection in the planning process. Article 4 suggested that environmental protection standards were just as important as planning mandates: ‘The resources of the natural environment may be used to serve socioeconomic needs to the extent permitted by the socioeconomic plans, land-use plans, and environmental protection standards.’ On a plain reading of this provision, natural resources could be utilized only to the extent permitted by plans *and* environmental standards. However, neither article 4 nor any other provision of the 1980 EPDA specified what would happen if the plan called for a use inconsistent with environmental norms.

Additional provisions on environmental protection in planning activities were located in articles 68–70 of title III, chapter 2, concerning environmental aspects of capital investment.

Specific Environmental Protection Provisions

Title II of the 1980 EPDA included nine chapters dedicated to accomplishing specific environmental protection goals:

- Chapter 1: Protection of the earth’s surface and minerals (arts. 13–17),
- Chapter 2: Protection of waters and the marine environment (arts. 18–24),
- Chapter 3: Protection of the atmosphere (arts. 25–32),
- Chapter 4: Protection of flora and fauna (arts. 33–37),
- Chapter 5: Protection of landscape values and rest environments (arts. 38–41),
- Chapter 6: Protection of green areas in cities and villages (arts. 42–48),
- Chapter 7: Protection of the environment against noises and vibrations (arts. 49–52),
- Chapter 8: Protection of the environment against waste and other forms of pollution (arts. 53–58),
- Chapter 9: Protection against radiation (arts. 59–63).

Generally speaking, these chapters restated for each environmental medium the general goals outlined in title I, articles 1 and 2. Although they did not include specific environmental norms, such as emissions standards or discharge limits, the chapters of title II provided the framework for further regulation by appropriate ministerial departments. Article 15 was the central provision of title II, chapter 1, on protecting the earth’s surface and minerals. It required anyone using land

to ensure its protection against pollution. More specifically, article 15 obligated farmers and forestry workers to use chemicals, such as pesticides, only in quantities that would not disturb the balance of nature, for instance by contaminating the soil or water or poisoning plants, animals or ecosystems. Detailed controls on chemical use were to be established by regulation of the Ministers of Agriculture and Forestry, in consultation with the Minister of Administration, Local Economy and Environmental Protection and the Minister of Health and Social Welfare.

Chapter 2, on protection of waters and the marine environment, required that waters be managed rationally; responsible agencies and users were to 'prevent or control' any changes rendering waters unfit for human consumption, plant and animal life or economic use (art. 18). Measures for preserving 'the balance of nature' had to be designed and implemented when a proposed water use threatened significant environmental harm (art. 19). Similar measures were required for land-based activities (irrigation and drainage, among others) that, without protective measures, could have substantially affected water quality (art. 20, sec. 1). The newly created (in arts. 94 and 95) State Environmental Protection Inspectorate (*Państwowa Inspekcja Ochrony Środowiska* or PIOŚ) could impose mandatory conditions on the construction and operation of waterworks in areas requiring special protection from water pollution (art. 20, sec. 2). Article 22 provided that, before any economic activity could proceed in such areas, an expert analysis of environmental impacts was required. In order to preserve drinking water supplies, article 21 placed groundwater under 'special protection' from pollution, and the Ministry of Administration, Local Economy and Environmental Protection was instructed to restrict or prohibit the use of waters when necessary to protect water quality (sec. 23, sec. 1). That ministry and others with authority over water resources were to issue specific regulations implementing these statutory mandates (art. 24).

The goal of chapter 3 on protection of the atmosphere was to keep air pollution concentrations at or below levels established by regulation, and to limit emissions from production facilities, automobiles, waste dumps and other emissions sources (art. 25). In regulating non-specific sources of air pollution, such as landfills, the 1980 EPDA was ahead of its time. Article 26 of the Act defined the phrase 'air pollution' inclusively as 'the emission into the air of solid, liquid or gaseous substances in quantities which may adversely affect human health, the climate, flora and fauna, the soil or waters.' This constituted a radical and progressive departure from the old definition under the 1966 Air Pollution Act.

The 1980 EPDA's requirements for air-polluting activities were contained in articles 27 and 28, which, respectively, obliged individuals and organizations engaging in economic activities to take appropriate measures to control air pollution emissions and monitor them on site. Under article 29, the Council of Ministers was authorized to promulgate regulations establishing permissible concentrations of air pollutants and guidelines for measuring and monitoring pollutant levels in the atmosphere. The regional (*województwa*) authorities also were given a sub-

stantial role to play in air pollution control. Article 30 authorized them to regulate categories and levels of air pollutants. Interestingly, under section 2 of that provision, compliance with established standards did not relieve individuals and organizations of civil liability for the environmental harm they caused.¹⁹ In the event of a violation of air pollution norms (established in accordance with the 1980 EPDA), the organ of state administration at the regional level could suspend indefinitely the activities causing the violation until they were brought within the standards (art. 31, sec. 1). It is important to note, however, that the authority to suspend polluting activities was discretionary. Only in cases where the polluting activities combined with ‘especially disadvantageous atmospheric conditions’ to pose a direct threat to human life or health were the regional authorities *required* to shut down polluters (art. 32). In such cases, the agencies also *could* restrict the use of internal combustion motor vehicles; and they had discretion to suspend polluting activities where necessary to protect designated monuments (art. 32, sec. 2). Finally, the Minister of Administration, Local Economy and Environmental Protection, in cooperation with the Minister of Health and Social Welfare, was instructed to establish more specific limitations for air pollutants emitted by internal combustion vehicles, and was authorized to prohibit the use of fuels, raw materials and technological processes that produced health-threatening levels of air pollution.

Despite strong language in the air pollution provisions about suspending polluting activities that posed a direct threat to human life and health, it is important to note that the Environmental Protection and Development Act provided administrators with a way to avoid imposing that sanction. Under article 71, if the harmful environmental impacts of an activity could not be reduced by available technologies, *but* the activity ‘fulfills a social need,’ instead of shutting down the facility the administrator could order that a ‘protective zone’ be constructed around it.

Chapter 4 of title II of the EPDA contained measures to protect plant and animal species through land-use planning (art. 34, sec. 1), proper forest management (art. 34, secs. 2–4) and the preexisting Nature Protection Act of 1949 (referred to in art. 35). The goals of these protective measures were to (1) create conditions under which plants and animals could fulfill ‘their biological functions for the benefit of the environment,’ (2) prevent or control harmful environmental impacts on plants and animals, (3) prevent the intrusion of outside threats into ecosystems that have exceptional social and scientific value, and (4) ensure the balance of nature to preserve species from extinction and overexploitation (art. 33, sec. 2). Article 34, section 4, authorized the Council of Ministers to issue specific regulations for protecting forests from air pollution, and article 36, section 2, empowered the Minister of Administration, Local Economy and Environmental Protection to establish rules for protecting botanical and zoological gardens. The most legally significant provision of chapter 4, however, was article 37 which ‘prohibited’ the destruction of plants that bond to the soil and the destruction of plants and animals contributing to a clean environment in general and water qual-

ity in particular. This provision might have become a powerful tool for protecting wetlands and other natural resources.²⁰

Chapter 5 on the protection of landscape values and rest environments incorporated by reference the provisions of the 1949 Nature Protection Act, adding only a few significant new features to landscape protection. Article 40 required that landscape values and their protection be considered in socioeconomic and land-use plans, and article 41 authorized the regional People's Councils to prohibit or enjoin, as necessary, activities threatening destruction or deterioration of regional landscapes.²¹

Chapter 6 concerned protection of 'green areas' in cities and villages, including urban parklands, lawns, workers' garden plots, and small undeveloped spaces between buildings (art. 42, sec. 2). The goal was to preserve 'appropriate conditions of sanitation, climate and recreation' for city dwellers and workers (art. 43, sec. 1). Any decision to alter green spaces for other uses had to be consistent with local land-use plans, and changes planned for areas containing old-growth forests required approval from the regional governor and the Ministry of Administration, Local Economy and Environmental Protection. One important provision of chapter 6 restricted the use of chemical substances in urban areas to prevent harm to existing green spaces (art. 44). In villages, the People's Town Councils were authorized to designate rural parks, even on privately owned properties (art. 47, sec. 2). Private property rights also were restricted under article 48, which required landowners to maintain undeveloped properties 'in their proper states.' Before removing living trees and other vegetation in the course of developing land, property owners had to receive permission from the local office of the regional organ of state administration, which could require replacement or relocation of removed trees (art. 48, sec. 2).

Chapter 7 of title II included provisions to protect the environment against excessive noise and vibration. Article 49 required individuals and economic units to protect the environment from excessive noise by refraining from noisy activities or by applying appropriate technologies to reduce noise levels. Article 50 called on the Council of Ministers to define 'excessive noise' by establishing permissible ambient noise and vibration levels. Authorities at the regional level were authorized to assign noise limitations to specific facilities, and when violations occurred, to suspend noise-generating activities (art. 51). Under article 52, local authorities could even restrict the use of trucks and other means of transportation at night to minimize noise pollution.

Chapter 8 concerned measures to protect against pollution from waste. This marked Poland's first ever attempt to regulate waste disposal and treatment (see Jendrońska and Radecki 1991, 70). It required, among other things, that waste-generating facilities and individuals take measures to reduce waste (art. 53). Any wastes not amenable to recycling or reuse had to be destroyed, rendered harmless to the environment, or collected and removed to designated disposal sites under conditions ensuring environmental protection (art. 54). The methods of disposing

of particularly harmful (contaminated or infectious) wastes had to be approved by the appropriate regional authorities. Local governments were responsible for ensuring appropriate conditions for waste disposal (art. 56), and they were required to pick up and dispose of household wastes (art. 57).

Chapter 9, the last in title II of the 1980 EPDA, concerned environmental protection against radiation. This was an interesting addition to Poland's environmental law because the number of nuclear activities in Poland was quite low—Poland had (and has) no nuclear power plants. There were a substantial number of nuclear weapons in Poland, but these were under the control of the Soviet Red Army and, thus, beyond the regulatory reach of the Polish government. The Polish Party/state was appropriately concerned, however, with the environmental threat posed by low-level radioactive waste from sources including medical institutions. Articles 59 and 60 on protection against radiation required the safe generation, use and disposal of radioactive substances and equipment. Buildings housing radioactive substances and associated activities were to be constructed, maintained and decommissioned in a manner designed to protect public health (art. 60). Regional administrators also could require the construction of protective zones around the buildings (in accordance with art. 71 of chapter 3). Under article 61, radioactive wastes were to be recycled, when possible, under supervision of the State Environmental Protection Inspectorate. Finally, article 62 provided that all organizations utilizing or producing substances or equipment emitting harmful radiation were obliged to monitor and measure radiation levels in the immediate ambient environment.

As noted earlier, the various chapters of title II did not provide specific standards to accomplish any of the goals they established. That task was left primarily to the Council of Ministers, which, before the end of 1980, issued more than one dozen regulations implementing various provisions of the Act. By 1981, most (though not all) provisions of the 1980 EPDA were implemented (see Radecki 1990a, 131n140).

Environmental Duties and Liabilities

Title III, chapter 1 of the 1980 EPDA established environmental protection duties. All economic enterprises and persons engaged in economic activities were obliged to ensure environmental protection (art. 64). Individuals also were responsible for protecting the environment when using it for non-economic purposes, such as tourism and recreation (art. 65). Under article 66, government agencies, enterprises and individuals all had a duty to ensure environmental protection by:

1. carefully siting production facilities to minimize environmental impacts;
2. taking protective measures during economic activities;
3. restoring environmental conditions damaged by economic activities;

4. making use of new technologies to reduce environmental impacts of economic activities, especially waste reduction and waste prevention technologies;
5. constructing, installing and maintaining appropriate environmental protection equipment;
6. installing monitoring equipment and conducting necessary measurements;
7. complying with environmental protection requirements in planning, designing and manufacturing machinery, equipment, etc.;
8. recycling wastes and effluents, or ensuring their effective neutralization or disposal; and
9. making use of scientific and technical progress and legal, economic and administrative means of environmental protection.

Section 67 specified additional duties of plant managers and workers. It is not at all clear, however, that the term ‘duty,’ as used throughout chapter 1 of title III, was meant to signify *legal liability*, which is addressed separately in title IV of the EPDA (arts. 80–85). Those liability provisions are remarkable in that they were premised on the so-called ‘polluter pays principle,’ which in 1980 was a relatively new and untested concept of environmental policy.²² Unfortunately, the ‘polluter pays principle’ was ill suited to a command economy in which the Party/state was ultimately responsible for virtually all pollution. Nevertheless, according to article 80 of the EPDA, the person or organization responsible for pollution damage was supposed to bear the cost. Article 82 reiterated the mandate of article 66 requiring enterprises and individuals engaging in economic activities to eliminate environmental threats and to restore preexisting environmental conditions. The regional authorities were authorized to specify requirements under these provisions, and could levy fines for non-compliance. In addition, article 83 *required* the Minister of Administration, Local Economy and Environmental Protection to recommend that other ministerial departments with authority over specific economic activities close down any plants causing serious environmental damage while in chronic violation of administrative regulations.

In addition to economic penalties, polluters could be subject to sanctions under the Penal Code of 1969 (1969 Dz.U. No. 13, item 94) or the Petty Offenses Code of 1971 (1971 Dz.U. No. 12, item 114). Under the Penal Code, polluters who intentionally created a great threat to human life, health and property could be imprisoned for up to ten years, or five years for negligently created threats (1969 Dz.U. No. 13, item 94, art. 40, secs. 1 and 2). The 1980 EPDA added to these provisions new offenses punishable by three years’ imprisonment for (1) pollution causing ‘potential danger’ (art. 107), (2) negligence in the utilization or maintenance of pollution control equipment (art. 108), (3) violation of duties with respect to environmental protection of agricultural and forestry lands (art. 109), and (4) waste imports from abroad (art. 108a). For lesser offenses involving mistreatment of animals (art. 62), water pollution (art. 109), contamination of real

estate (art. 117), destruction of plants (art. 144) and damage to fields, forests or gardens (arts. 148–157), the EPDA stipulated prosecution under the 1971 Petty Offenses Code. Conviction for a petty offense could result in a three-month prison term, plus fines. However, throughout the Communist era, penal sanctions were rarely imposed on polluters (for reasons to be addressed in Chapters 5 and 6).

Administrative Fees and Fines

The liability provisions of the EPDA were not the only economic mechanisms in the statute. Title V created a system of resource-use fees and title VII required economic penalties for violations of environmental norms. The resource-use fees mandated in article 86 were to be imposed on all resource-consuming and polluting activities. Air pollution fees were to be exacted per unit of emissions, including emissions within legal (i.e., permitted) levels. This was a novel mechanism for emissions reductions in 1980. At that time, few countries used effluent taxes to control pollution; even today, American air pollution laws impose no fees on emissions within legal limits. Poland's Council of Ministers established the fee schedule by regulation. Emissions exceeding legal limits were subject to additional penal fines, under article 110. Regional authorities were to institute schedules of fines for effluent discharges, pollution emissions, noise-producing activities, chemical uses and waste-dumping activities that violated environmental conditions. The collected fines and fees were earmarked for a new Environmental Protection Fund (art. 87), which would finance construction of sewage treatment facilities and other public environmental projects specified under article 88. Poland's system of fees and fines became the Party/state's primary tool of environmental protection during the 1980s; civil and criminal liability were only of secondary importance. Unfortunately, as already suggested, the EPDA's economic mechanisms were ill suited to the socialist economic system with its endemic soft budget constraints.²³

Administrative Responsibilities

We already have seen that article 66 of the EPDA imposed a general duty on government agencies as well as enterprises and individuals to ensure environmental protection in implementing Party/state economic policy. Regulations implementing these duties were to be issued by the Ministry of Administration, Local Economy and Environmental Protection. Additional administrative responsibilities were set forth in chapter 1 of title VI of the EPDA on '[o]rganization of environmental protection.' The most important of these additional responsibilities concerned the newly created State Environmental Protection Inspectorate (art. 94). Under article 95, the Inspectorate was responsible for (1) supervising compli-

ance with environmental conditions established under the Act, (2) monitoring the state of and changes in the environment, (3) initiating activities of environmental protection and restoration, and (4) ‘popularization’ of environmental protection principles. The Inspectorate was not, however, an ‘enforcement’ agency; it had no independent statutory authority to levy fines or shut down harmful polluting activities. The Inspectorate was subordinated to both the Minister of Administration, Local Economy and Environmental Protection and the Council of Ministers, either of which could override decisions of the Chief Inspector. In addition to the Inspectorate, a new State Environmental Protection Council was established under article 97 as an advisory body to the Council of Ministers on environmental protection matters.

Public Participation in Environmental Protection

Before the 1980 EPDA, non-governmental organizations in Poland had virtually no role to play in environmental protection, such as it was. Even quasi-official groups, such as the State Council for Nature Protection and the Nature Protection League, were reduced to playing only insignificant roles in the system. The 1980 Environmental Protection and Development Act was a first step toward giving independent ‘social organizations’ at least a limited role in the administrative process. Article 100 authorized them to file lawsuits to suspend environmentally threatening economic activities and order restoration. In addition, before an administrative authority could approve any new economic activity likely to have substantial environmental impacts, the social organizations had to be informed and their comments and objections had to be considered. As we shall see in Chapter 4, these provisions were never fully implemented, and to the extent they *were* implemented their value was limited. Nevertheless, non-governmental environmental organizations became increasingly active in Poland, asserting considerable political, if not legal, influence.²⁴

Environmental Research

Various provisions of the 1980 EPDA were designed to further scientific understanding and public awareness of environmental values and problems. Article 10 of the statute required educational institutions and research facilities to conduct research into environmental conditions and ways to improve environmental performance in production through technological innovation. Article 11 mandated that environmental protection be added to the curriculum in schools at all levels and in worker training courses. Article 12 required the mass media to disseminate information on environmental protection, but did not assure the media *access* to environmental information.²⁵

2.6. The Administration of Environmental Protection in Poland: 1980–8

The Birth of an Independent Environmental Movement

The enactment of the 1980 EPDA constituted only the first event of what was to be a very active period for environmental protection in Poland. The year 1980 also marked the birth of Solidarity and a critical, if too brief, period of political liberalization in Polish politics. Environmental information, traditionally guarded as a state secret (see Chapter 4, §4.5), was more widely publicized, albeit in limited quantities. The government and the *Sejm* ordered detailed investigations into the state of the environment, investigations which led, by the middle of the decade, to official disclosures of widespread environmental devastation. In 1985, for example, the official Communist Party daily, *Trybuna Ludu* (People's Tribune), reported that 35 percent of Poland's population lived in exceptionally bad environmental conditions that would require at least 25 years to correct (*Uncensored Polish News Bulletin*, Aug. 8, 1985). Meanwhile, new 'social organizations' appeared under the banner of Solidarity, including the National Commission for Environmental Preservation, established in July 1981, and the Polish Ecology Club (*Polski Klub Ekologiczny* or PKE), which became the first truly independent pro-ecological organization in People's Poland.²⁶

At its founding in Kraków in September 1980, the PKE was an illegal protest organization, comprised of academics, journalists, scientists, farmers and workers. Thanks to its affiliation with Solidarity, by the middle of 1981 the PKE had more than 1,000 members and was registered as a legal social organization. This enabled the PKE to operate through official political and legal channels, as well as through grassroots protest actions. The PKE became a force in Polish politics, accomplishing real and lasting achievements for environmental protection before, during and after the period of Martial Law (from December 1981 to December 1982). Among its notable early accomplishments was a series of protests and a lawsuit against the Skawina aluminum works near Kraków, which, along with the factory's poor economic performance, led the government to close the plant permanently in January 1981. This single event gave the PKE popular exposure and credibility, which greatly facilitated its efforts to increase public awareness of environmental issues. The PKE conducted scientific investigations, published reports and newsletters, and held weekly public meetings in Kraków. These various information gathering and disseminating activities also helped to inform local political leaders. On December 2, 1981, Kraków's People's Council passed a resolution with the following introduction:

The People's Council of the City of Kraków has determined that the degradation and devastation of the resources and assets of its natural environment have been growing steadily worse over a period of many years. It has found in particular

that the level of air pollution has reached a critical point, especially in the city of Krakow, that there is a growing shortage of water for residential and agricultural users, that lands under cultivation are being steadily degraded, that plant and animal life is in danger, that the landscape is being scarred, and, above all, that there is a direct threat to human life and the historical monuments of the Old Town.

The resolution called for a review of local and regional socioeconomic and land-use plans. More specifically, it recommended revising the plans to provide for the phased shut-down, by 1985, of the raw materials production divisions of two large polluters, the Kraków Sodium Products Plant and the Kraków plant of the 'Bonarka' Inorganic Chemicals Industry (*Walewski, Rada Narodowa Gospodarka Administracja*, May 17, 1982).

When Martial Law was declared in December 1981, the PKE was not outlawed, though its publishing and protesting activities were forced underground. Unlike Solidarity, the PKE remained a legal, officially registered 'social organization.' The PZPR's apparent tolerance of the PKE supports the view that the Party was, at least to some extent, sincerely interested in improving environmental protection. When Martial Law was lifted in December 1982, the PKE emerged larger and more influential than ever. By the mid-1980s, it had 3,000 members and 17 branches throughout Poland, and it continued to exert substantial influence over the Party/state. Polluting factories built without facilities for waste disposal or sewage treatment were forced to close by PKE protests. On one occasion, the Club persuaded the Party/government to relocate a bitumen processing plant that was polluting water used by another enterprise for making fruit juice (Fura 1985, 5). These successes spurred on other groups of what became, by the end of the decade, a diverse environmental movement consisting of more than 135 (mostly informal) organizations (Gliński 1996, 155–6), including the Party/government-sponsored Social Movement for Ecology, the Catholic Church-affiliated Franciscan Ecology Movement, and the green–pacifistic Freedom and Peace group.

The few but remarkable successes of Poland's environmental movement, particularly the Polish Ecology Club, were especially impressive given the political climate in which they operated. People's Poland was far from an open, pluralistic democracy in which interest groups are not only tolerated but expected to participate in policy making. The members of the PKE and other environmental organizations risked their freedom and (infrequently) their lives in protest actions. Even after Martial Law, police sometimes responded to protests with violence, as in Kraków in 1987 when a crowd of about 500 members of the Freedom and Peace environmental group gathered in the Market Square for a peaceful protest against air pollution from the Lenin Steelworks in neighboring Nowa Huta. According to published accounts, police dragged away several protestors, arrested ten, struck one in the face and kicked another (*Reuters North European Service*, March 27, 1987). Environmental protestors were charged with taking part in an illegal assembly, a misdemeanor under Poland's Petty Offenses Code, which brought the

case within the jurisdiction of Poland's infamous lay courts, the *kolegia*. In these thoroughly non-professional courts, the judges were untrained, the proceedings were devoid of legal process and, not coincidentally, defendants had virtually no chance of acquittal. Of 230 citizens tried before *kolegia* during November and December of 1986, 229 were convicted. The *kolegia* were empowered to send environmental 'criminals' to prison for up to three years; they levied stiff fines and seized any property used in committing the offense—bad news for an environmental protestor caught distributing leaflets from her car.²⁷

The threats faced by environmental protestors should not be exaggerated, however. The Party/state in People's Poland usually tolerated environmental protests, which often took place without incident, as in 1988 when 1,500 members of Freedom and Peace staged a protest against a toxic chromium factory that was contaminating Wrocław's water supply (reported in *Reuters Library Report*, Sept. 16, 1988). By tolerating environmental protests and occasionally acquiescing in protestors' demands, the Party/state demonstrated a limited commitment to environmental protection. However, that commitment extended only so far. The Party/state never acted to protect the environment at the cost of its own political authority or the ideological principles that legitimized Party rule (at least for the Party itself), including the commitment to full employment and high rates of production and economic growth.²⁸ Coincidentally, enterprises closed following environmental protests always happened to be inefficient and obsolete. Enterprises that were profitable or significant either for national defense or for the economy never were closed or even significantly restrained following environmental protests. That does not mean, however, that the environmental protests were irrelevant. On the contrary, without them it is quite unlikely that *any* plants would have been closed. The Communist authorities virtually never shut down plants simply because they were economically inefficient or obsolete, so long as they met production targets. Environmental protests did, therefore, play a significant role in closure decisions.

Environmental Protection in Socioeconomic and Land-Use Planning

Spurred by the emerging environmental movement, the Party/state continued to move forward with its own agenda for environmental protection. In July 1981, at the Ninth Extraordinary Congress of the PZPR, environmental protection concerns were once again at the top of the agenda. The Congress adopted a resolution reiterating the 'polluter pays principle' for enterprises, and called for the increased use of 'legal-financial mechanisms' to support the implementation and administration of the environmental laws (PZPR 1983, 676). Beginning in 1982, economic reforms included substantial environmental components, and new laws enacted to implement the reforms contained environmental provisions. The 1982 Law on Socioeconomic Planning (1982 Dz.U. No. 7, item 51, art. 9, sec. 3), for example, expressly required the inclusion of environmental concerns in planning processes.

As a result, environmental requirements began appearing in socioeconomic plans. The three-year plan for 1983–5 included a section on environmental protection that ‘recommended’ actions to (1) avoid spreading contamination to still pristine areas of the country, (2) preserve areas of special beauty and endangered species, and (3) stop further degradation of already devastated areas. Even more significantly, this three-year plan, which had the force of law, designated four areas of the country, including Gdańsk and Kraków, as environmentally ‘endangered.’ In those areas, the plan banned further industrial development that might exacerbate environmental conditions, and instructed the Council of Ministers to develop detailed plans for protecting and restoring environmental conditions. Nevertheless, as Ludwik Jastrzębski (1990, 82) noted, the 1982 Socioeconomic Planning Law did not ‘create a balance between the interests of industry and environmental protection.’ It did not mandate the imposition and implementation of environmental protection conditions by economic planners, but mandated only their ‘consideration.’

Two years after the new Socioeconomic Planning Law, still more significant environmental requirements were included in the 1984 Land Use Planning Act (1984 Dz.U. No. 35, item 185). Land-use planning serves an important regulatory function in all countries to ensure that diverse activities in any given area are compatible. In the socialist system, land-use planning was even more important; indeed, it was unavoidable. Because the Party/state owned all the means of production and centrally planned the entire economic system, there was no way for it to avoid responsibility for development decisions and other important land-use considerations. Rather than deal with those issues as part of a single plan, People’s Poland, like the other socialist countries of Europe, adopted a bifurcated planning system. Socioeconomic plans set levels of production, resources allocation and prices, while separate and distinct land-use plans determined where economic activities and other developments could be located. In theory, land-use and socioeconomic plans had equal legal status, but in practice the bifurcated planning scheme resulted in the subordination of land-use plans to socioeconomic plans, with predictable results for environmental protection requirements.

The goal of land-use planning under Poland’s 1984 statute was the ‘comprehensive management of the territory of the entire country’ (art. 1). Land-use plans were to be prepared at three different levels—national, regional and local—and updated every five years (art. 7, sec. 1 and art. 19, sec. 3). National plans included primary environmental protection safeguards, including conditions on land use to ensure environmental protection and the ‘proper use’ of resources (art. 18). Regional plans were supposed to assure achievement, in a given region, of the goals outlined in the national plans (art. 20, sec. 1), and local plans were to be based similarly on regional and national plans (art. 25, sec. 3). The planning process started with research into possible uses of a given area of the country, including considerations of present and future needs, followed by preparation of specific development plans, plan approval and, finally, project development. The

process was supposed to be inclusive, but in practice the scope of participatory rights depended on the type of plan under consideration. For national plans, only associations had to be consulted; individuals had no right to participate and no specific procedures were mandated (art. 19). At the regional level, administrative authorities had to provide public notice of the planning process, and specified individuals (experts and specialists) had the right to intervene at various stages. The authorities had to give due consideration to all recommendations, comments and objections before approving a final plan (arts. 21 and 22). The same was true at the local level, where participatory rights were even greater—any interested individual could intervene—and more detailed procedures were specified (arts. 27 and 28).²⁹

Changes in the Administrative Structure of Environmental Protection

As environmental protection was being incorporated to a limited degree into socioeconomic and land-use plans, the administrative organization of environmental protection underwent further changes. Responding to a perceived lack of progress on environmental protection and pressure from academic and scientific organizations, the *Sejm* in 1983 created a new Office of Environmental Protection and Water Management (1983 Dz.U. No. 44, item 201). This agency took over primary administrative responsibility under the 1980 EPDA, though not for long. After only two years it was replaced by a new Ministry of Environmental and Natural Resources Protection (*Ministerstwo Ochrony Środowiska i Zasobów Naturalnych*). This reorganization was significant because, for the first time, it vested primary nature protection responsibilities (under the 1949 Nature Protection Act) and environmental protection responsibilities (under the 1980 EPDA) in the same ministry. This facilitated the coordination of pollution control and nature protection activities. There was a notable omission, however: silviculture activities in national parks were controlled by the Ministry of Agriculture, Forestry and Food Management (*Ministerstwo Rolnictwa, Leśnictwa i Gospodarki Żywnościowej*) (see Radecki 1990a, 135). Consequently, there was some confusion about which agency had primary responsibility for national park management (see Lachiewicz 1986, 9–10). Finally, in 1987 the two ministries agreed on shared responsibility for national park supervision; the Forestry Ministry would be in charge of general park management, while the Environment Ministry would be the lead agency for all nature protection responsibilities within the parks (see Radecki 1990a, 139).

In 1984, the *Sejm*'s Commission for Administration, Town and Country Planning, and Environmental Protection conducted its first assessment of the implementation of the 1980 EPDA. According to reports broadcast on Polish television (*BBC Monitoring Service*, May 31, 1984), the Commission found an 'alarming reduction in the quantity of pure surface waters throughout the country' and noted a 60 percent rise in 'gas pollution.' The Commission concluded that 'the gov-

ernment's actions were insufficient and not completely successful.' Nevertheless, from 1985 to 1989 the administrative structure of environmental protection remained fairly stable, while the Party/state tried other methods for improving the implementation, administration and enforcement of environmental laws and regulations. In 1985, the *Sejm* issued a resolution committing regional People's Councils to devote at least 7 percent of their total spending to environmental protection, but by 1987 this mandate had been met in only 11 of 49 regions. Consequently, the *Sejm* issued another resolution that year calling on the Council of Ministers to improve environmental law enforcement (see Radecki 1990a, 136). Meanwhile, the Ministry of Environmental and Natural Resources Protection prepared a 'National Program for Environmental Protection in Poland to the Year 2010' (*Narodowy program ochrony środowiska przyrodniczego do roku 2010, Projekt*, 1988). When completed, this document became the subject of high-level meetings organized at the Council of State (see Radecki 1990a, 136). Environmental interests were critical of the plan and, before the end of that year, new ecological political parties appeared, including the Polish Ecological Party and the 'Green Party.'

2.7. Conclusion

Environmental protection remained a nominal political priority right up until the end of socialism and the demise of the Polish Communist Party in 1989. But for various reasons (described in Chapters 3–5) this did not translate into a high level of environmental law enforcement. Violators were not consistently sanctioned, and the elaborate system of environmental fees and fines proved ineffectual. Despite the Polish Party/state's regulatory efforts and its increasing financial commitment to environmental protection toward the end of the 1980s, pollution levels continued to rise, valuable natural resources increasingly were wasted, and Poland's ecological crisis intensified.

However, this chapter has demonstrated that these were not the consequences of utter neglect and indifference. From the very beginning of the Polish People's Republic, environmental and nature protection concerns received official recognition and, increasingly, Party/state action. Unless we are prepared to claim that the constitutional provisions, statutes and regulations were all intended to accomplish nothing more than deception, we will have to look to alternative explanations for the failure of environmental protection under socialism. And to claim that Poland's environmental laws were merely disingenuous attempts to deceive, we would have to explain why the Party/state took such apparent pains to accomplish such a meager goal. Specifically, why did the PZPR initiate many environmental protection efforts in the 1960s and 1970s, long before there was any apparent domestic or international political pressure?

The next four chapters of the book attempt to fashion an alternative explanation that is more plausible, comprehensive and, I hope, persuasive. That explanation

tion views the failure of environmental protection in People's Poland as a *systemic* consequence of totalitarian socialism. Legal, political, economic and ideological features of the (real) socialist system combined to impede effective environmental protection. To be sure, Poland's totalitarian rulers might have altered the system to better facilitate environmental protection, but that would have required the Party to sacrifice substantial political and economic authority.

Notes

1. This chapter is a revised version of Cole (1995a). Among the best sources on environmental law in Poland are Sommer (1993a), Jastrzębski (1990), Radecki (1990a), and W. Brzeziński (1974, 1975). Post-Communist developments in environmental law and administration are treated in Chapter 7.

2. Early legislation and other historical documents relating to environmental protection in Poland are collected in Boć and Samborska-Boć (1994).

3. In this section and the two that follow, I rely heavily on Radecki (1990a).

4. On the socioeconomic implications of the 1949 Nature Protection Act, see Nowak (1964, 24–30).

5. NEPA requires agencies of the federal government, when contemplating major actions that could significantly affect the quality of the human environment, to consider potential environmental impacts. For more on the similarities between NEPA and Poland's 1949 Nature Protection Act, see Jendrośka (1996a).

6. Congress created the Council on Environmental Quality (CEQ) in NEPA to oversee the statute's implementation and administration. The CEQ issued regulations under NEPA which specified the procedural requirements for fulfilling the statute's mandates (40 C.F.R. Part 1500).

7. On non-forestry matters, the 1949 Act required other ministers to consult with the Forestry Minister, but not necessarily with any other representatives of PROP.

8. The Council of Ministers (*Rady Ministrów*) was the highest administrative organ in the state, comprised of ministers from all the ministerial departments. The Prime Minister served *ex officio* as chair of the Council. The Council of Ministers was analogous to the President's cabinet in the United States, only more powerful, since it could issue regulations and rescind ministry orders.

9. This new committee was reorganized in 1951 as the Nature Protection Works (*Zakład Ochrony Przyrody*) located in the Ministry of Education. Two years later, the Nature Protection Works was removed to the newly established Polish Academy of Sciences (*Polska Akademia Nauk* or PAN). Then, in 1957 a new Committee for Nature and Natural Resources Protection (*Komitet Ochrony Przyrody i jej Zasobów*) was created in PAN. In 1978, that committee was reorganized into the Commission for Nature Protection of the Scientific Committee 'Man and Environment' (*Komisja Ochrony Przyrody Komitetu Naukowego 'Człowiek i Środowisko'*). In 1981, this last committee was officially acknowledged as the successor to the Nature Protection Committee, which had replaced PROP in 1949 (see Radecki 1990a, 108).

10. Actually, the available sources conflict about the location of the State Inspectorate for Water Protection. Andrzej Deja (1992, 4), of the Ministry of Environmental Protection,

states that it was established in the Navigation Ministry. Professor Radecki (1990a, 114), in contrast, asserts that it was located in the Ministry of Public Utilities.

11. For a discussion of the ‘higher necessity’ defense in Polish environmental law enforcement, see Chapter 3 (§3.6).

12. Another problem of the 1966 Air Pollution Act was that it spoke in terms only of ambient concentrations (amounts of a pollutant in the atmosphere at a certain location, usually measured as a fraction of the total chemical make-up of the atmosphere, e.g., parts per million or micrograms per cubic meter). The government was left to translate from ambient concentrations to emissions levels (amounts of a pollution released into the atmosphere, usually measured in tons per year, per day or per hour) *for each individual source of air pollution in the country*. The problem was that Poland did not have the technical capability to make these computations. Such technical restraints were a chronic problem of air pollution legislation and administration until the very end of People’s Poland.

13. On the utility of the Civil Code for environmental protection, see generally Radecki (1987).

14. Chapter 4 (§4.3) discusses environmental litigation under the civil and criminal codes, as well as under Poland’s environmental laws.

15. The Polish term ‘*środowisko*’ directly translates into the English word ‘environment,’ and it was first used in the context of ‘environmental protection’ (*ochrona środowiska*) in the 1970 Academy of Sciences resolution appointing the Scientific Committee ‘Man and Environment’ (see Radecki 1990a, 119).

16. The use of economic instruments (fees and fines) in Poland is addressed in Chapters 3 (§§3.3 and 3.4) and 5 (especially §5.5); also see Mazurkiewicz (1986).

17. The first (and apparently only) complete English translation of the 1980 EPDA was published in the *Joint Publication Research Service*, no. 75483, Apr. 11, 1980, at 34–67. Many commentaries on the 1980 Environmental Protection and Development Act have been published (see Ochocki 1980a; Radziszewski 1987; Jastrzębski 1979a; Jastrzębski and Rest 1982; Wałaszek-Pyziół 1982; Jendrońska and Radecki 1991; Biernat and Wasilewski 1992).

18. The Polish verb ‘*kształtować*’ literally means to shape, form or mold (see Stanisławski 1969). As used in the title of the Environmental Protection and Development Act, it has been variously translated as ‘shaping,’ ‘control’ and ‘development.’ I believe ‘development’ comes closest to describing the meaning of *kształtować* as used in the 1980 EPDA.

19. Article 30, section 2, did not change existing law. Long before the 1980 EPDA was enacted, the Polish Supreme Court ruled that a glass factory was liable for damages when its air pollution emissions destroyed vegetables in neighboring fields, even though its emissions were within permitted limits. *Uchwała Sądu Najwyższego z dnia 7 kwietnia 1970 r. [Resolution of the Supreme Court of April 7, 1970], Orzecznictwo Sądów Polskich i Komisji Arbitrażowych [Rulings of the Polish Courts and Arbitration Commission or OSPiK]* 1971, notebook, 9, item 169 (reprinted in Radecki 1991a, 59; also see Skoczyła 1986, 167).

20. However, article 37’s potential as a source of wetlands protection was never tapped; indeed, it was not even recognized by legal scholars in Poland. For example, Jerzy Sommer (1991), in an article specifically concern wetlands protection in Poland, did not even mention article 37 of the Environmental Protection and Development Act.

21. On the relationship between nature conservation and environmental protection in the 1980 EPDA, see W. Brzeziński and Kulesza (1982).

22. On the development of the ‘polluter pays principle,’ see Opschoor and Vos (1989).
23. For more on the misapplication of market mechanisms for environmental protection in a non-market economy, see Chapters 3 (§§3.3 and 3.4) and 5 (§5.5).
24. Poland’s independent environmental movement is introduced below in §2.6.
25. Chapter 3 provides a critical assessment of the 1980 EPDA and other environmental protection laws in People’s Poland.
26. On the history of the Polish Ecology Club, see Fura (1985).
27. For more on environmental protection in Poland’s courts, see Chapter 4 (§4.4). For more on the *kolegia*, see Andrzejewski and Nowicki (1991).
28. I address these and other Communist Party ‘legitimacy principles’ in Chapter 4 (§4.2).
29. On public rights to participate in the land-use planning process, see Jendroška and Nowacki (1991, 41–2).

Chapter 3

THE 'ENFORCEABILITY' OF POLAND'S ENVIRONMENTAL LAWS

This chapter begins the comprehensive explanation of Poland's environmental crisis, focusing on specifically *legal* problems of environmental protection. It is, in a sense, a critical supplement to Chapter 2's largely descriptive history of Polish environmental law. Subsequent chapters will address political, economic and ideological impediments to environmental protection. This organizational schema is admittedly artificial; in the socialist system politics, economics, ideology and law were inextricably intertwined in fact and by design. It is no simple matter, therefore, to segregate 'legal' issues from politics, economics and ideology. But it does make some sense to address law as a separate object of analysis, if we distinguish between issues of law enforcement and law *enforceability*.

3.1. Law Enforcement and Enforceability

The relationship between enforceability and enforcement can be described this way: enforceability is a necessary but insufficient condition for enforcement, so that lack of enforcement may, but does not necessarily, signify unenforceability. Enforceability analysis asks whether a law *could* be enforced to achieve its objectives, while enforcement analysis concerns whether the law *is* actually being enforced to achieve its objectives. On my definition, a law that is perfectly unenforceable is incapable of actual enforcement. A law that is perfectly enforceable still may not actually be enforced for political or economic reasons extraneous to the legal text. There are, of course, degrees of enforceability; it can be reduced as well as destroyed. Because some legislative ambiguities impair enforceability more than others, some laws naturally are more enforceable than others.

Enforceability is a function of what is written into the laws; it is internal to the laws themselves. A statute that does not create binding obligations is, of course, unenforceable; as a normative matter it might as well not exist (though it

may have symbolic value). The same is true for a law that creates a binding obligation, but one that no law enforcement agency could possibly monitor, such as thought-crime legislation. Even a law that creates a binding obligation capable of oversight is unenforceable if it provides no sanctions for non-compliance; violation of the law constitutes a crime to be sure, but without consequence. The ultimate question for enforceability analysis is whether the law as written is capable of enforcement to achieve its stated objective(s). This question goes not only to the text of the statute, but also to the choice of legal strategy. For example, a decision to regulate with economic incentives rather than administrative commands may (or may not) affect enforceability, depending on features of the political-economic system in which the laws operate. However, on questions of legal strategy the distinction between law enforceability and enforcement tends to break down, as we shall see.

Poland's environmental laws generally were enforceable (see Kulesza 1988, 26). Despite many weaknesses, ambiguities, gaps and exceptions, they *could* have been more successfully implemented and enforced than they were in fact. Many, if not most, enforcement problems resulted from structural or incidental features of the political-economic system—what Jerzy Wróblewski (1991, 259) has called ‘the sociocultural facts conditioning the origins and operation of statutory law’—rather than from the laws themselves. That is not to say, of course, that Poland's environmental laws were perfectly enforceable; many features *in the laws themselves* at least hindered enforcement.

The enforceability problems *in* socialist environmental statutes can be divided into five types, which are, in fact, common to virtually every modern legal system; they do not necessarily reflect the role of law in a given society. These problems include ambiguous drafting, lax standards, weak (or non-existent) penalty provisions, limited (or non-existent) participation rights, and provisions creating broad exceptions or exclusions from liability. Such ‘problems’ may or may not be drafted intentionally into a statute. They may be manufactured, however, to serve a variety of purposes, including propaganda. For example, a law that appears quite tough may be weakened (intentionally or unintentionally) by lax standards or ambiguous drafting.

3.2. Legal Ambiguities

Ambiguous drafting *may* impede or destroy enforceability, depending on the nature or type of ambiguity. It can be intentional or result unintentionally from sloppy drafting. And legislative provisions can be ambiguous in a number of ways. A common ambiguity in Polish environmental laws concerns the assignment of legal obligations. Consider, for example, the almost unintelligible language in article 72 of the 1980 Environmental Protection and Development Act (1980 Dz.U. No. 3, item 6):

In the initiation of the protection of animate natural resources, certain natural creations or areas of landscape value, which protection is projected in regulations on environmental protection, the principles of their utilization and necessary prohibitions and rules applicable to an object of protection and its domain, which principles enable the preservation of protective natural or landscape values, are defined.

This language has been interpreted to require that principles for utilizing protected resources be promulgated together with protective measures. But even if this much can be gleaned from article 72 (and I am not sure it can), the provision still lacks any indication of the role that these principles are to play and how they are to relate to the protective measures. In other cases the statutory language may be simple and straightforward, expressing a clear legislative intent to create binding legal obligations, but the requirements are insufficiently specific. In other words, there are legislative gaps. This was a common form of ambiguity in Poland's environmental laws. Most environmental laws in People's Poland were mere declarations; they did not set specific standards. As Jerzy Sommer (1986b, 206–7) has put it, parliamentary acts, not only in the environmental field, were very general and of a non-specific character and sometimes vague. So, in practice, the executive rule-making dominated.⁷ For instance, article 17 of the 1980 EPDA provided the following instruction:

2. Organizational units and physical persons that undertake to exploit mineral deposits or direct their exploitation have a duty to undertake necessary means to protect resource deposits, and also to protect the ground, surface-, and groundwaters, gradually to undertake reclamation of the area under exploitation and return elements of the natural environment to their proper states.

3. Rules for managing mineral deposits relative to environmental protection in mineral exploitation shall be provided in specific regulations.

Mining enterprises could not possibly have known the extent of their legal obligations for environmental protection just from reading this language. They had to await subsequent action by the Council of Ministers, the Minister of Mining or the Minister of Administration, Local Economy and Environmental Protection. But such gaps in the law do not necessarily create enforceability problems. In fact, it is a common practice of law drafters in virtually all countries to codify goals, procedures and deadlines but to delegate to expert administrative agencies the task of setting specific norms. In the United States, for example, most of the federal environmental laws enacted during the 1970s employed precisely this approach. In the 1970 Clean Air Act (42 U.S.C. §§7401 et seq.), Congress established air quality goals—in the form of ambient pollution concentration standards designed to protect public health with an adequate margin of safety (42 U.S.C. §7409(b)(1))—and established procedures and deadlines for achieving that goal.

But Congress delegated to the Environmental Protection Agency (EPA) the task of setting specific emissions standards. As with Polish mining enterprises under the 1980 EPDA, American industries subject to regulation under the 1970 Clean Air Act could not know, just from reading the statute, what was expected of them; they had to wait for the EPA to fill in the gaps. This did not impede enforceability, however, because Congress established clear goals, instituted procedures and deadlines for agency action, and provided mechanisms for congressional and judicial oversight of the ongoing regulatory process. From this and numerous other examples we can conclude that legislative ambiguities or gaps do not necessarily impede enforceability. But they *may* impede enforceability if the legislature fails to specify a responsible agency or to provide sufficient directions, procedures and deadlines concerning what, how and by when the agency is supposed to regulate.

Unfortunately, gaps in Poland's environmental laws often created enforceability problems because, unlike their American counterparts, Polish administrators frequently were not given sufficient directions about what, how and by when to regulate. In addition, the laws failed to provide for administrative oversight; there was no recourse if the agency simply failed to comply with statutory mandates. For example, when article 17, section 3, of the 1980 EPDA called for 'specific regulations' to ensure environmental protection in mining activities, it did not specify (1) an agency responsible for promulgating those regulations, (2) a deadline for issuing standards, (3) means of determining the sufficiency of standards, that is, whether they conformed to statutory goals, or (4) consequences for failing to issue regulations under the article. Nor were there avenues outside of the 1980 EPDA for effectively enforcing article 17's mandate. Poland established a High Administrative Court in 1980 to hear citizens' complaints against specific arbitrary and capricious state actions (1980 Dz.U. No. 4, item 8), but that court was not authorized to hear complaints concerning agency failures to implement laws or promulgate necessary regulations. Even if it had been authorized to order agencies to comply with statutory mandates, the High Administrative Court could not have salvaged article 17 of the 1980 EPDA because the statute did not even specify a responsible ministerial department or set deadlines for regulations. In fact, there was not a single instance in the history of People's Poland where a recalcitrant agency was forced by court order to promulgate or rewrite a regulation to comply with the requirements of any environmental law. As Richard Bolan (1992, 304) has written, '[t]he court system [in People's Poland] provided no recourse. State agencies felt above the law, and a citizen's right to bring state agencies to court was at best a fiction.'

Ministries were actually accountable only to the Party/government (see Rybicki 1984, 98–9), but that hardly constituted a check on administrative irresponsibility. Agency action or inaction presumably reflected government policy to begin with, so limiting agency oversight to the government was tantamount to no oversight. The lack of effective agency oversight in People's Poland was confirmed by the vast number of cases where ministries avoided or ignored statutory

environmental protection responsibilities without consequence. The most glaring case concerned article 15 of the 1980 EPDA, which purported to regulate the use of agricultural chemicals:

3. Organizational units and physical persons undertaking activities related to agricultural or forestry uses can apply chemical and biological agents directly or indirectly to the soil only in amounts and ways not injurious to the balance of nature, and especially to avoid causing harmful contamination of the soil or water, destruction of animals, plants or ecosystems, or deterioration of their conditions for living, cultivation or breeding.

Article 15, section 4, further provided that the Agriculture and Forestry Ministries, in cooperation with the Ministry of Administration, Local Economy and Environmental Protection 'shall designate the procedures, the range and conditions for implementing the principles discussed in section 3, in accordance with the needs of environmental protection.' These were not particularly ambiguous mandates; they designated responsible agencies and provided sufficient directions for regulatory standards. However, no regulations ever were issued under article 15, leaving a gaping hole in the law. Despite the clear mandate in the 1980 EPDA, there was 'no environmental regulatory scheme to control pesticides' in People's Poland (Jendrośka 1990, 31). Administrators also avoided statutory responsibilities under the public participation provisions of the 1980 EPDA. Article 99, sections 2 and 4, and article 102 of that statute authorized the creation of new institutions for public participation in environmental protection. Up to the end of 1988, however, these provisions remained, in the words of Jerzy Jendrośka and Wojciech Radecki (1991, 67–8), 'a dead letter' because the necessary executive orders never were issued.

Poland's environmental laws were rife with unclear provisions, fuzzy mandates and far too many holes in administrative authorizations. They also suffered from a special type of ambiguity resulting from two or more conflicting legal rules (see Bochniarz and Bolan 1991). In some cases, such conflicts may have made it difficult or impossible to tell, before the fact of actual enforcement, which (if any) of the conflicting legal rules would prevail. But in many other cases, conflicts did not create much confusion because the outcome was predictable from the circumstances. For example, when some provision in a socioeconomic plan conflicted with an environmental regulation under the 1980 EPDA, it was clear, given the political-economic facts of life in People's Poland, that the plan would prevail. But this was entirely a function of the politics of enforcement; it did not reflect on the *enforceability* of environmental regulations. The story was different, though, when the environmental law itself provided for exceptions or exclusions; that *did* constitute a real limitation on enforceability, as we shall see later in this chapter.

There is no way to 'keep score' or draw conclusions about the percentage of Poland's environmental problems resulting from legal ambiguities or any other

kind of enforceability problem. But an exhaustive survey of enforceability problems resulting from ambiguities and gaps in legal rules really is beside the point, which is merely to identify and explain the nature and scope of various enforceability problems in Poland's environmental laws. Ambiguities in the laws rendered specific provisions unenforceable and reduced the overall enforceability of statutes, but they only rarely nullified entire laws—the non-existent pesticide regulations were a glaring but uncommon exception. Even without express and definite guidelines and directions, administrators for the most part did implement the laws; they issued specific norms and, as the next section discusses, most of the norms they established were not merely enforceable but fairly stringent.

3.3. Lax Environmental Standards in Polish Law

It somehow seems inappropriate to write of lax standards as contributing to problems of enforceability. All other things being equal, lax standards should be relatively easy to enforce—it is, after all, easier to do a little than a lot. Much depends, of course, on the circumstances. Lax standards certainly relate to law enforceability to the extent they impede the achievement of environmental protection goals. Assuming that the Polish Party/state enacted its environmental laws to achieve some level of effective environmental protection (which seems warranted in light of the history recounted in Chapter 2), then it makes sense to refer to lax standards as potential drags on enforceability. In any case, lax standards are problems *in the laws themselves*, rather than external features related to actual enforcement.

As noted in the preceding section, Poland's environmental laws contained few standards or norms. They mostly declared goals and aspirations that were to be achieved in accordance with more detailed environmental regulations, land-use plans, and socioeconomic plans.¹ In order to judge the efficacy of environmental standards, we must therefore look beyond the statutes themselves to the regulations issued under them. This does not alter the analysis, however, because those regulations become part of the law and, as such, part of the enforceability analysis. Poland's environmental standards (including ambient air quality standards and water quality standards) provide little grounds for criticism. They certainly did not impede whatever environmental protection goals they were intended to achieve. And they compare quite favorably with environmental standards of other Communist and capitalist countries, including the United States. For instance, Poland's air quality standards were more inclusive and more stringent than comparable American standards. Poland's Council of Ministers issued air quality standards under the 1980 EPDA on September 30, 1980, for 54 pollutants (1980 Dz.U. No. 24, item 89), compared with only six 'criteria' pollutants with national ambient air quality standards under the American Clean Air Act. And, as Table 3.1 shows, comparable Polish standards were more stringent.² Indeed, all of Poland's pollution standards were fairly stringent, and they were set pursuant to exemplary

Table 3.1. Comparison of selected ambient air quality standards in People's Poland and the United States in 1980³

<i>Pollutant</i>	<i>Time average</i>	<i>Polish standards</i>	<i>American standards</i>
Sulfur dioxide	Annual mean	64 µg/m ³	80 µg/m ³
	24-hour	350 µg/m ³	365 µg/m ³
Nitrogen oxides	Annual mean	32 µg/m ³	100 µg/m ³

Sources: Polish standards—1980 Dz.U. No. 24, item 89; American standards—Anderson et al. (1990, 165, table 3.1).

procedures. For example, Poland established water quality standards, in the form of maximum allowable concentrations of various pollutants, based on 49 indicators of water quality that accounted for biological properties of different water bodies and projected uses (see Sommer 1984).

Maximum permissible ambient pollution levels do not, of course, tell the whole story of pollution control. Ambient concentration levels are largely, though not entirely, determined by emissions rates. So, in People's Poland, as in the United States, air quality standards become the reference point for determining necessary emissions limitations. Enterprises were not directly responsible for attaining the ambient air quality standards; they were obliged only to meet the emissions limitations (if any) included in their individual operating permits. Those limitations were based on the difference between the goals established in ambient standards and existing concentration levels. This entailed a complicated process of translation. First, the administrators had to determine baseline pollution levels, which meant monitoring and measuring existing pollution concentrations. They then had to calculate the total amount of emissions reduction necessary to reduce ambient concentrations to legal levels. Finally, administrators had to allocate necessary emissions reductions among various pollution sources. In other words, they had to limit emissions of regulated pollutants from each individual source so that emissions from all smokestacks would not cause ambient concentrations to exceed permissible levels. For this process to work, environmental regulators had to be able to determine some acceptable baseline concentration of each pollutant in the atmosphere (before setting emissions limits); they had to know the chemical properties of pollutants, including how pollutants interact with other constituent elements of the atmosphere; and they had to understand meteorological and topographical features in each region. In addition, the ability to determine baseline concentrations of pollutants in the atmosphere required minimal measuring and monitoring capabilities without which neither ambient standards nor emissions limits could rationally be set.⁴ In other words, a regulatory strategy based on ambient air quality levels required a fairly high level of technological sophistication. However, People's Poland was operating under severe technologi-

cal limitations; pollution-monitoring equipment was in short supply, and what little equipment was available was faulty and not uniformly calibrated. Unlike the United States, for example, People's Poland did not possess elaborate computer models to supplement its monitoring and to aid in relating emissions levels to ambient concentration levels (under various atmospheric conditions). Under the circumstances, the selection of a regulatory approach based on ambient concentration levels may have been impractical. But those same technological limitations likely would have rendered *any* strategy of pollution control more or less unenforceable. On a purely textual analysis of the laws, however, there surely was nothing inherently problematic about regulating emissions on the basis of ambient concentration standards.

Lax pollution control standards were not, in any case, a big problem in People's Poland; at least it cannot be maintained that Poland's statutory requirements were patently insufficient to accomplish minimal environmental protection goals. Although the statutes tended to delegate (often in ambiguous mandates) responsibility for setting standards, administrators responded, as a rule, by establishing fairly stringent standards, which, had they actually been enforced, could have resulted in substantial environmental protection.

There was, however, a different kind of 'standard' (broadly understood) in Polish environmental laws that raised significant enforceability problems: the use of resource and pollution fees. Poland first introduced pollution and resource charges in the 1974 Water Law (1974 Dz.U. No. 38, item 230); regulations under that statute instituted a schedule of fees for water consumption and diversion (1975 Dz.U. No. 33, item 181; also see Mazurkiewicz 1986, 36). Six years later, in the 1980 EPDA, the Party/state applied resource-use and pollution fees broadly across the whole range of natural resources and economic activities. The EPDA mandated per unit fees for air pollution emissions, waste storage, timber harvesting, water diversion and consumption, waste water discharges, and the use of agricultural lands for non-agricultural purposes. Fees were also charged for driving cars in areas under special protection, such as national parks (1980 Dz.U. No. 3, item 6, art. 86). This broad application of user and pollution fees was progressive, and not only for a Communist country. In the 1980s, other countries in Western and Eastern Europe instituted similar fees. Many countries (including France, West Germany, Japan, the Netherlands, Switzerland, the UK and the USA) charged for noise generation; some (including Australia, Belgium, the Netherlands and the USA) imposed waste production fees; a few (such as Australia, France, West Germany, Italy and the Netherlands) charged for the right to use or discharge effluent into water; and only three (France, Japan and the former Czechoslovakia) instituted fees for air pollution emissions (see Opschoor and Vos 1989, 34, table 3.2; Leden 1975, 67). None, however, imposed as many charges, covering as many resources and pollution sources, as People's Poland. Poland's sweeping application of environmental charges was certainly unique in the Soviet bloc. Hungary's 1976 Act on the Protection of the Human Environment (*The Statutes of the Hun-*

garian People's Republic, 1978), in contrast to Poland's 1980 EPDA, introduced no resource-use or pollution charges of any kind (see Enyedi and Zentai 1987, 213). Nor did the Soviet Union's environmental legislation; on the contrary, up to 1990 Soviet land and water laws reiterated the ideologically based mandate of free use of socially owned land and water (see 1968 Vedomosti SSSR, Issue No. 51, item No. 485, art. 8; 1970 Vedomosti SSSR, Issue No. 50, item No. 564, art. 15).⁵ Perhaps more surprisingly, Poland's use of market mechanisms for environmental protection exceeded (and still exceeds) the practice in the West. To this day the United States, for example, exacts no per unit charges for air pollution emissions or water effluent discharges within legal limits.

Poland's early and extensive use of pollution and resource-use charges under the 1980 EPDA was unique and progressive, but it was not an effective policy for environmental protection in the socialist economic system. For reasons to be discussed in Chapter 5, market mechanisms for environmental protection require markets to be effective. But as quasi-legal standards, Poland's user and pollution fees were clearly enforceable; nothing in the 1980 EPDA or administrative regulations created barriers to fee assessment and collection. The law clearly delegated authority to the Council of Ministers to establish procedures and, most importantly, amounts for environmental charges (1980 Dz.U. No. 3, item 6, art. 86, sec. 3). As we already have seen, such statutory delegations are common and do not necessarily indicate enforceability problems. They may, however, if administrators are permitted to set fee levels so low that they cannot possibly achieve their statutory purpose(s). Assuming the purpose of fees and fines under the 1980 EPDA was to create an incentive for enterprises to reduce pollution emissions and increase conservation of natural resources,⁶ enforceability would seem to require that fees be set at levels that would induce *some degree* of the desired behavioral changes. It is questionable whether fees at any level could have affected enterprise behavior in the socialist economic system, however, given endemic soft budget constraints. But that concern (which I address in detail in Chapter 5, §5.5) relates not so much to the laws themselves as the choice of regulatory strategy. For present purposes it is enough to ask whether the fee schedule, as established in regulations under the 1980 EPDA, was sufficient to accomplish its ostensible goal. In the case of People's Poland, the answer seems to be that the fees were *not* sufficient to induce pollution reductions and increased conservation of resources.

In his book on environmental fees and fines in People's Poland, Marek Mazurkiewicz (1986, 35) noted that '[f]ees for the economic use and transformation of the environment are thought to be a practical means of bringing the production costs of single economic units into accord with social costs.' But this could happen only if fees were set high enough to reflect the social costs of the economic activities. And to set fees properly required the ability, first, to determine social costs and, then, price resources accordingly. Arguably neither of these conditions can be met successfully anywhere in the world, let alone in a socialist country where costs and prices are arbitrary, that is, set by planners without regard

for what someone actually is willing to pay for any given product or commodity. No country in the world prices its natural resources (e.g., via user fees or pollution charges) at levels close to social costs. But is that strictly necessary for environmental charges to be useful policy instruments? Perhaps if the goal is some Utopian conception of 'perfect' environmental protection. If, however, the goal is merely to induce polluters and resource users to some incrementally higher degree of environmental protection, it should be necessary only to set fees at levels that make it too costly for polluters and resource users to continue their present production and pollution patterns. In economic terms, fee levels must be set higher than (average) abatement costs. This presumes, of course, that firms operate in competitive markets where profit determines survival, that is, where budget constraints are reasonably hard. And, as we shall see in Chapter 5, this presumption did not hold for socialist economies. Nevertheless, environmental fees theoretically might have induced the desired behavioral changes in socialist enterprises had they impacted on the reward structure, by reducing either worker and management bonuses or the production levels on which those bonuses were based.⁷

It goes without saying that where natural resources fees are zero (or close to zero), as they were for many years in Poland and throughout the socialist world, they cannot affect production levels and, so, must fail to reduce rewards. Even after the Polish Party/state introduced environmental fees, first in the 1974 Water Law and more broadly in the 1980 EPDA, they tended to be nominal and insufficient to induce changes in patterns of resource use and pollution emissions (see, e.g., Wajda 1992, 502; Jendrońska 1992, 533). For example, the charge in 1980 for emitting 1 kilogram of lead into the air was 40 zlotys (approximately 0.008 1980 USD); the fee for emitting 1 kilogram of sulphur dioxide was much lower, only 0.2 zlotys (about 4/1000ths of one 1980 US cent) (1980 Dz.U. No. 24, item 93).⁸ These numbers alone do not tell us whether the fees were sufficient for purposes of environmental protection; we also need information concerning marginal abatement costs. Once we knew how much it would cost polluters to reduce pollution emissions (through technological installations or process changes) to a certain desired level, then we would be in a position to judge whether the fees were high enough to alter economic behavior. But even without that information, we should recognize at least that Poland's environmental charges were higher than zero, which is what many countries, including the United States, charge today for air pollution emissions and water effluent discharges within legal limits. Nevertheless, Poland's pollution and resource use fees pretty clearly were insufficient to induce the desired changes in economic behavior. Some evidence of this comes from Polish statistics showing that Polish enterprises became less productive throughout the 1980s, while investing more natural resources and emitting more pollution.⁹ This is just the opposite of what we would expect to see from effective environmental charges. There was, of course, a variety of systemic and incidental reasons for the relative increase in natural resources use and pollution emissions

in Poland,¹⁰ but among them surely was the fact that fee schedules for resource use and pollution emissions were too low to accomplish the statutory goal of reducing emissions and increasing conservation.

To be fair, fees under the 1980 EPDA were intended not only to induce changes in economic behavior; another goal was to finance the new National Environmental Protection Fund, established under title V, chapter 2, of the 1980 EPDA. As far as that goal was concerned, the system of environmental charges created no enforceability problems. At any level, assuming actual assessment and collection, the fees would (and did) accomplish the purpose. By 1983, fees totaling more than 10.5 billion zlotys (approximately 103 million 1983 USD) had been paid into the National Environmental Protection Fund (Mazurkiewicz 1986, table 3). So, it cannot be said that the system of environmental charges created in the 1980 EPDA was completely unenforceable, that is, incapable of minimally fulfilling statutory goals.

Finally, it is important to distinguish between environmental fees and non-compliance fines under the 1980 EPDA. Both are economic mechanisms for environmental protection, but from a legal point of view they serve different functions. Fees constitute quasi-legal standards for environmental protection; they are charged on a per unit basis for resource use and pollution emissions *at all levels*. Fines, by contrast, are not 'standards' in any sense. They are *penalties* charged for violating standards. If an enterprise in People's Poland exceeded its permitted level of emissions, that constituted a violation resulting possibly in fines. While fees were intended to induce behavioral changes independently of legal standards for pollution, fines were intended merely to induce compliance with the legal standards. Despite these important differences, fees and fines under Polish environmental laws suffered similar enforceability problems, as the next section discloses.

3.4. Weak Penalties

If Poland's environmental standards were fairly stringent and mostly enforceable, the same cannot be said, as a rule, for the non-compliance penalties provided in statutes and regulations.¹¹ In the same batch of regulations that introduced resource-use and pollution fees (1980 Dz.U. No. 24, item 99), the Council of Ministers imposed administrative fines for violations of pollution control standards. The goal of the fines, of course, was to deter violations. However, in People's Poland fines were not set with reference to the marginal costs of pollution control or production; they were established in reference only to resource-use and pollution fees. Fines were set at exactly four times the fees charged per unit of emissions above permitted levels. They were doubled if the violation continued unabated for three straight years or if the violation occurred in the more heavily polluted regions of Kraków and Katowice (see Sommer 1990b, 36–9). But the

most important question is whether they were sufficient actually to deter violations. The consensus is that they were not. As Jerzy Jendrośka (1992, 533) has written, the ‘fines were low and offered a cheaper option than compliance with environmental standards,’ so polluters not surprisingly preferred to pay the fines rather than abate the pollution (see Mazurkiewicz 1986, 96). Actually, the penalties themselves were easy enough to enforce, but their low levels definitely undermined the enforceability of goals and standards under the 1980 EPDA and other environmental laws. For enterprises it was a matter of simple economic sense: why comply with stringent environmental norms when it cost so little to violate them? The logic inherent to this question was compelling. Perhaps more than any other features *in the laws themselves*, the low levels of environmental fines undermined the enforceability of legal standards. But it was not *just* the low level of fines that impeded effective environmental protection. Had the fines been 100 times higher, they still would not have accomplished their intended purpose of inducing enterprises to comply with environmental standards. However, the reasons for this had nothing to do with the laws themselves (or with enforceability as I have defined the term), and everything to do with the nature of the socialist system, particularly the Party/state’s conflict of interest as environmental regulator and nominal owner of regulated enterprises, which exacerbated already soft budget constraints (see the discussion in Chapter 5, §5.5). Arguably, it was the use of market mechanisms per se rather than the level of fines that most hampered environmental protection in the non-market economy.

Administrative fines were not, however, the only penalties provided for violating environmental rules. The 1980 EPDA incorporated provisions of the 1969 Penal Code (1969 Dz.U. No. 13, item 94), which permitted prison terms of up to ten years for violators (art. 40, secs. 1 and 2). I take statutory provisions authorizing imprisonment to be inherently enforceable; so long as the duty is clearly delineated and a prison term, however long, attaches for specified violations, there should be no problem of enforceability. The penal sanctions authorized under Poland’s 1980 EPDA were high by international standards. For the sake of comparison, in Sweden the maximum term of imprisonment for violating the 1973 Act on Products Hazardous to Man or to the Environment was one year (see Organization for Economic Co-operation and Development 1977, 54). The biggest problem with Poland’s penal sanctions was that they were not actually enforced, as we shall see in Chapter 4. There were, however, two significant *enforceability* problems related to penal sanctions under the 1980 EPDA and 1969 Penal Code. First, only ‘persons’ could commit crimes, and enterprises were not considered legal ‘persons’ (1969 Dz.U. No. 13, item 94, art. 1). So criminal penalties applied in environmental cases only when identifiable individuals, rather than corporate entities, were responsible for the violations. This limited the utility of penal sanctions for environmental protection, and so reduced the enforceability of environmental standards. The second enforceability problem raised by penal sanctions under the 1980 EPDA concerned exclusions from liability under article 23 of the

1969 Penal Code. That and similar exclusionary or exculpatory provisions in the 1964 Civil Code, the 1980 Code of Administrative Procedure and the 1980 EPDA are discussed in section 3.6.

3.5. Limited Citizens' Participation Rights

The relationship between citizens' participation rights and law enforceability is not so obvious as that between enforceability and substantive legal standards or non-compliance penalties. It is possible to conceive, at least, of an enforceable environmental law that does not include provisions for citizens' participation in planning, decision making or enforcement. However, in many countries such citizen participation provisions are a regular feature of environmental legislation. This reflects a widespread perception that environmental rules are more enforceable with citizens' participation than without. And that perception stems from the fact that there are so many polluters to be watched, while governmental enforcement capabilities necessarily are limited by fiscal constraints. In addition, there is the question of administrative oversight: who regulates those charged with regulating the polluters? Public participation provisions serve both purposes. Citizens can monitor and, when necessary, sue responsible administrative agencies for failing to comply with statutory directives, while, at the same time, supplementing agency enforcement efforts by monitoring and bringing actions against polluters. Besides facilitating law enforcement, public participation provisions can increase the universe of available information for environmental policy making; by directing decision makers to seek public comments and suggestions on environmental policy matters, the legislature can promote better informed decision making.

Exemplars of both types of public participation rights are found in American environmental laws.¹² In the 1970 Clean Air Act (42 U.S.C. §§7401 et seq.), Congress included a prototypical citizen suit provision to facilitate enforcement, that is, to enhance enforceability. 'Any citizen' was authorized to sue polluters for violating emission standards or administrators for failing to perform non-discretionary duties (42 U.S.C. §7604). A different kind of public participation provision designed to improve environmental decision making is found in the 1969 National Environmental Policy Act (NEPA) (42 U.S.C. §§4321 et seq.). NEPA requires federal agencies to prepare elaborate environmental impacts assessments (EIAs) for all proposed major actions that could significantly affect the quality of the human environment. The EIA process is designed to be open and inclusive. Agencies must solicit comments from concerned individuals and organizations, and consider all plausible alternatives (including the 'no action' alternative) to the proposed action. NEPA was intended to improve environmental decision making but not environmental law enforcement. The statute does not mandate any substantive outcome; alternatives must be considered, but the agency ultimately can select whatever alternative it prefers, even the most environmen-

tally harmful. An individual citizen or group can sue for *procedural* failures under NEPA, but they cannot sue the agency for its substantive decision. NEPA's purpose, then, is not to ensure decisions that are best for the environment but to improve the decision-making process by ensuring that environmental impacts receive due consideration. The implicit presumption is that, even if NEPA does not force certain results, a better-informed agency is likely to reach substantively better decisions, including for the environment. Indeed, the information gained through environmental impact assessments has led administrators to change and, in some cases, drop planned actions (see Funk 1990, 759).

The widespread diffusion of such public participation provisions throughout the industrialized world over the past 25 years suggests a common perception that they significantly enhance the enforceability of environmental laws. People's Poland first provided limited public participation rights in environmental protection even before the 1980 EPDA, though these were mostly paper rights; citizens could not (in any case, did not), try to make use of them. The lone exception was the right to sue to prevent individual harm under the 1964 Civil Code (1964 Dz.U. No. 16, item 93, arts. 222 and 439).¹³ However, that exception was never very meaningful for purposes of environmental law enforcement mainly because citizens could sue only for their own harm; one could not sue to prevent or stop harm to others. The 1980 EPDA increased the legal, if not the practical, ability of associations to sue polluters under the Civil Code. Article 100 of the EPDA provided a limited citizen suit provision, which permitted legally recognized organizations to sue in civil court to suspend environmentally threatening economic activities and to order environmental restoration. As of 1985, six environmental associations—the League for Nature Protection, the League to Combat Noise, the Polish Tourist Association, the Polish Angling Association, the Polish Hunting Association and, most significantly, the independent Polish Ecology Club—were on the Ministry of Justice's list of groups authorized to participate in civil proceedings. For a variety of political and economic reasons (to be discussed in subsequent chapters), these groups rarely sued under article 100. In one rare case from 1975 (before the 1980 EPDA increased the participation rights of recognized environmental associations), the League for Nature Protection, an official (i.e., Party-approved) conservation association, sued a grocers' cooperative for water pollution. The civil chamber of the Supreme Court ruled without comment for the defendant (this case is discussed in Jendrośka and Nowacki 1991, 46). Between 1973 and 1980, a total of 4,754 civil lawsuits were filed in People's Poland. Of these, only 117—approximately 2.5 percent—were for environmental harm. Plaintiffs won complete victories in only 5 percent of those 117 cases; they received partial compensation in 56 percent (Jendrośka and Nowacki 1991, 46). Given their fiscal constraints and poor prospects for success in court, it is not surprising that environmental associations did not begin actively participating in civil proceedings against polluters until after the PZPR's fall from power in 1989. Nevertheless, in the eyes of most analysts, the public participation provisions of the 1980 EPDA constituted a

potentially far-reaching and effective tool of environmental law enforcement (see Jendroška and Nowacki 1991, 42–3; Nowacki 1993, 73).

In addition to authorizing recognized associations to sue polluters in civil court, Article 100 of the 1980 EPDA allowed them to 'petition' administrative agencies to stop a polluting activity and bring suit in the High Administrative Court. But before 1990, administrators retained unfettered discretion to grant or deny association petitions. Thus, the 'right' of associations to participate in the administrative process was far less substantial (if not completely insubstantial) than their right to sue in civil court. The 1980 EPDA also included a (quasi-) NEPA-like provision *authorizing* administrators to require that enterprise managers or developers submit 'opinions' on environmental impacts (1980 Dz.U. No. 3, item 6, art. 70). But this provision was vacuous. Aside from the fact that administrators were free *not* to require environmental impact opinions, the statute failed to stipulate content requirements or criteria for determining the sufficiency of an environmental impact opinion. Even more importantly for present purposes, article 70 did not really constitute a citizens' participation provision because, unlike NEPA, it did not provide citizens or associations a statutory role in the process. For this reason, Jerzy Jendroška and Jerzy Sommer (1994, 169–70) have concluded that 'Poland is a typical example of a country in which the legal concept of EIA differs substantially from the NEPA process.' The omission of public participation rights in Poland's EIA process was partly rectified, however, in article 100 of the 1980 EPDA, which, in addition to authorizing environmental lawsuits by recognized associations, included a NEPA-like requirement that administrative authorities inform and consider the comments and objections of recognized social organizations before approving any new economic activity likely to have substantial environmental impacts. Although this still did not amount to the broad public participation rights guaranteed to American citizens under NEPA, the rights created in article 100 of the EPDA did enhance to some extent the enforceability of environmental law in Poland.

In 1980, besides enacting the EPDA, the *Sejm* also amended the 1960 Code of Administrative Procedure, providing, among other things, for increased participation in the administration of environmental protection (1980 Dz.U. No. 4, item 8). These amendments did not go nearly so far, however, as article 100 of the EPDA. Under the amendments to the Code of Administrative Procedure, recognized associations were permitted to intervene in administrative court suits brought by others; but associations could not initiate administrative court suits of their own (art. 31). This basically mirrored the right of associations to intervene in civil suits under the 1964 Civil Code.

More important for public participation in environmental protection than the provisions of either the Civil Code or the Code of Administrative Procedure were the relevant sections of the 1984 Land-Use Planning Act (1984 Dz.U. No. 35, item 185). Under article 29 of that statute, any interested individual or group had the right to comment on or object to the contents of a local land-use plan within

21 days after its promulgation. The law also ostensibly guaranteed public access to regional plans (art. 14). Citizens' comments on land-use plans were in no way binding on local or regional authorities, but they were sometimes effective. Of course, after the land-use plans were adopted, recognized organizations could challenge them in court under article 100 of the 1980 EPDA. That the provisions of the 1984 Land-Use Planning Act were only sporadically and incompletely implemented did not negate their contribution to the enforceability of environmental protection requirements; they increased (at least in theory) citizens' and social groups' access to and influence over the Party/state's environmental protection apparatus.

Ultimately, however, the various public participation provisions discussed in this section had only minor impacts on day-to-day enforcement (or lack of enforcement) of environmental laws in People's Poland. This is in stark contrast to the experiences of other countries, including the United States, where citizens' participation provisions have contributed significantly to environmental law enforcement. There are at least two reasons similar provisions did not bring similar results in People's Poland. First, Poland's public participation rights were not nearly so broad; citizens could intervene only in certain cases, in few forums, and in limited ways. Most importantly, citizens were pretty much restricted to taking action against polluters. Even after the 1980 amendments to the Code of Administrative Procedure, citizens had no real recourse against recalcitrant administrators. They could sue ministers in the High Administrative Court for harm suffered from specific administrative decisions in individual cases, such as industrial location decisions and pollution permitting. But they could not sue for agency inaction, including failure to implement the laws. In short, the public participation provisions in Poland's environmental laws were insufficient to enhance enforceability significantly. This conclusion should not come as a surprise, however, given the totalitarian structure of the political system in People's Poland (which is the subject of Chapter 4).

3.6. Exceptions that Swallowed the Rules

One final *enforceability* problem of environmental law in People's Poland resulted from the sweeping exceptions and exclusions from liability that were incorporated into virtually every piece of legislation. These were political-economic 'safety valves,' the legal means of last resort by which Party/state authorities could avoid their own rules. It was not strictly necessary, of course, to provide such *legal* mechanisms for avoiding environmental rules; the concept of 'socialist democracy' (discussed in Chapter 4, §4.1) gave the Party/state an extra-legal justification for violating its own laws. But as the socialist system grew increasingly legalistic in the years following Stalin's death, it became common for the Party/state to provide strictly legal means for avoiding statutory mandates and regulatory norms.

The relationship between legal exceptions and enforceability is clear. To the extent laws provide exceptions from liability, they tend to undermine the purposes for which liability was created in the first place. Every exception or exclusion in a law affects enforceability; by its own terms, the law cannot be enforced against activities or persons exempted or excluded by law from liability. But, of course, every law has its limits, and enforceability analysis extends only so far as a law's intended application. We do not conclude, for example, that the American Clean Air Act is 'unenforceable' because it does not regulate each and every air pollutant or polluter. Enforceability analysis is constrained by what the laws, as written, actually set out to accomplish. That said, certain types of exceptions and exclusions from liability *do* affect enforceability.

We can distinguish between what might be called 'simple' exclusions on the one hand, and 'political' exceptions on the other. An example of a simple exclusion is a statute that provides only limited coverage. For instance, a waste disposal law conceivably could apply to all waste producers, including individuals or households. However, no country's waste regulations require individuals or households to obtain waste generation or disposal permits; permitting and licensing requirements are limited to industrial and commercial waste generators and disposers. This kind of limitation obviously narrows the coverage of the regulation, but we would not say that it renders regulations 'unenforceable' with respect to those who are not covered. With a political exception, by contrast, enforceability always is affected because such exceptions can be applied arbitrarily. Consider a hypothetical waste regulation that includes the following provision: *This regulation shall not apply to waste generators where the state authorities determine that the national interest dictates otherwise.* Such a provision clearly would compromise enforceability because it provides a legal means for authorities to avoid enforcing the law whenever they choose. Stated generally, legal exceptions or exclusions raise problems of enforceability when they provide for political or economic expediency to trump legal rules on a case-by-case basis.

The 'Higher Necessity' Exception in Poland's Penal Code

The most prominent example of this kind of broad political exception in Polish law was the 'higher necessity' exception of the 1969 Penal Code. Article 23, section 2, of that Code permitted (and still permits today) the courts to waive liability where the activity causing the violation furthers some 'higher necessity.' In practice, this exception was interpreted to create an economic balance: if the 'value' of the activity causing the violation was greater than the 'value' of the environmental harm, then liability could be waived.¹⁴ It was an express and broad limitation on all criminal liability in People's Poland, and it constrained the enforceability of all substantive Penal Code provisions. Most importantly for our purposes, the 'higher (economic) necessity' exception limited the enforce-

ability of other statutes incorporating the Penal Code, including the 1980 EPDA. As noted in Chapter 2, the 1980 EPDA expressly incorporated article 140 of the 1969 Penal Code, which criminalized activities causing intentional or negligent threats to human life, health or property (1980 Dz.U. No. 3, item 6, art. 107). The EPDA also added new penal sanctions for causing 'potential danger' (art. 107), negligently using pollution-control equipment (art. 108), and violating duties with respect to environmental protection of agricultural and forest lands (art. 109). Each of these offenses was subject to the 'higher necessity' exception provided in article 23 of the Penal Code, which permitted judges and prosecutors to dismiss summarily and without judicial review any criminal violation of the EPDA. Polluters could not have known before-the-fact whether they would be saved by the 'higher necessity' exception, but the availability of this broad political exception certainly undermined environmental protection, and not just in theory. According to one report, the majority of prosecutions for penal violations of the environmental protection laws were discontinued for reasons of 'higher necessity' (Mykietyń and Radecki 1985, 38–40). Few criminal cases even made it into court.

Similar political exceptions from liability were written into the penal codes of other Communist countries. For example, section 20 of East Germany's Penal Code excepted from punishment criminal conduct aimed at fulfilling a 'higher duty, that is, conduct that, under the circumstances, was more beneficial for the socialist society and less harmful to state and social interests' (discussed in Radecki 1981, 221). As in Poland, the East German exception subordinated legal rules to political decisions, with substantial implications for law enforceability. It is interesting to note, by way of contrast, that such broad political exceptions are not found in the criminal codes of 'rule of law' states. The West German Penal Code came the closest, perhaps; it included exceptions from criminal liability in sections 34 and 59. But these were different from the broad political exemptions provided for in the Communist penal codes mainly because the discretion they provided to courts and prosecutors was clearly and distinctly limited. Section 34 was a typical necessity rule found in most contemporary criminal laws. It permitted courts (or prosecutors) to excuse an offense, such as trespassing, in order to avoid an imminent threat to life, limb or property; the perpetrator could be released from criminal liability if the danger averted exceeded the harm caused in averting it. Rather than balancing the economic interests of the state, section 34 merely balanced the harm caused against the harm averted. Section 59 of the West German Penal Code permitted courts to let an offender off with a warning in cases where (1) a substantial fine had already been incurred, (2) the court reasonably could anticipate that the perpetrator would, from that point on, lead a 'law-abiding life,' (3) the circumstances of the case suggested that a warning would be preferable to punishment, and (4) punishment was not required 'to defend the legal order.' Section 59 did not relieve perpetrators of liability, but gave courts limited discretion in meting out punishments (see RGBI, S. 127, as revised on Jan. 2, 1975; B.G.B1 'I,' S.1, as amended, as of Dec. 30, 1986).

Balancing Individual and Social Interests under the Administrative Procedures Code

The 'higher (economic) necessity' exception to environmental law responsibilities was available only for criminal offenses; it did not relieve polluters of civil or administrative liability. But similar exceptions were provided in the Code of Administrative Procedure. Articles 7 and 8 of that Code were interpreted in such a way as to allow the High Administrative Court, in any environmental case, to balance individual interests against the public interest. This was problematic because in a socialist country such as People's Poland, the public interest *always* outweighed the private interest. Moreover, in environmental cases the public interest commonly was on both sides of the dispute—the public interest in production and development versus the public interest in environmental protection. How one public interest prevailed over the other in such cases turned out to be a matter of pure politics rather than law (or even legal politics).

The Code of Administrative Procedure's public interest balancing test could *not* take violators completely off the hook; it did not relieve them of liability but was used after the finding of liability to determine the appropriate remedy. The public interest could dictate that compensation be reduced or even denied. And this created a disincentive for plaintiffs to sue in the first place, diluting the enforceability of the environmental rules. Plaintiffs who took the trouble and expense to bring a suit in administrative court could, and sometimes did, come away with nothing to show for it but a worthless finding of liability.

Exceptions in the 1980 EPDA

The 1980 EPDA included its own broad political exception from liability. Under article 82, every legal person and organizational unit was obligated to do everything possible to protect the environment but, under section 3 of article 82, polluting activities could continue where the environmental harm could not be prevented by technological or economic means. This exception was limited, however, by the requirement that the polluter had to contribute to the Fund for Environmental Protection 'a sum of money corresponding to the amount of damage resulting from the environmental disturbance.' Regional Party/state administrators were authorized to determine the amount of compensation based on the same kind of 'public interest' analysis provided in the Code of Administrative Procedures (1980 Dz.U. No. 3, item 6, art. 82, sec. 2). And it was used to similar effect. Legal standards of environmental protection were sacrificed by the 'public interest' determinations of local bureaucrats. In practice, when polluting enterprises complained that they did not have the technology or money to avoid or reduce the pollution, local administrators typically would let them off the hook if they agreed to pay compensation for all environmental harm caused. How much

did they have to pay? That was a matter for bargaining between the enterprise and the bureaucrats, with no administrative oversight or judicial review. Article 82 thus undermined the enforceability of virtually all environmental protection obligations under the 1980 EPDA, reducing them to matters for private negotiation between polluters and local bureaucrats, both of whom represented the same political master.

Another provision of the EPDA had a similar impact. Article 71 permitted a polluting activity to continue if it was found to be in the ‘public interest,’ which, according to Eduard Radziszewski’s (1987, 141) commentaries on the EPDA, meant that the activity was ‘crucial for the national economy.’ In such cases, the authorities could (but did not have to) require the polluting facility to construct a protective zone around its boundaries (1980 Dz.U. No. 3, item 6, art. 71, sec. 1). This provision undermined the enforceability of environmental protection norms by giving enterprises, industrial ministries and planners a wedge to use against complying with environmental standards. True, it applied only to activities ‘crucial for the national economy.’ But in a planned economy where all economic activities were closely integrated, so that bottlenecks in one sector often would close down production in all others, what activity was not ‘crucial?’

Exceptions in Regulations

Even when the environmental statutes contained no provisions permitting political (i.e., discretionary) exceptions from liability, exceptions sometimes were fashioned in executory regulations. For instance, article 110 of the 1980 EPDA directed regional administrative authorities to levy administrative fines on polluters for violating legal norms under the 1980 EPDA or subsidiary regulations. There were no statutory exceptions. The Council of Ministers was given responsibility for determining ‘the amount, *the principles*, and the procedures for assessing financial penalties’ (art. 110, sec. 2). In its 1980 implementing decree, the Council of Ministers authorized the environmental protection authorities to reduce administrative penalties on a case-by-case basis, according to some ‘rather enigmatically formulated’ criteria (Sommer 1990b, 38). Under this regulation, bureaucrats had complete discretion to reduce or completely rescind fines, thereby undermining (in some cases completely) the purposes for which fines were imposed.

This is not to argue that administrative discretion in assessing penalties *always* or *necessarily* undermines the law. As we shall see in Chapter 7, in post-Communist Poland the Ministry of Environmental Protection exercises statutory discretion to waive administrative fines, but only if the polluting enterprise is in the process of installing environmental protection equipment. If the environmental installations are completed within five years, the penalty is extinguished; otherwise, the penalty is reinstated and doubled (see Sommer 1990b, 38). This kind of discretion may actually enhance the enforceability of environmental law. So

it is not administrative discretion per se that undermines enforceability, but the nature, extent and direction of the discretion.

3.7. Conclusion

Despite the broad political exceptions, the limitations on public participation, weak penalties and various ambiguities, gaps and conflicts within the environmental laws of People's Poland, those laws for the most part were enforceable. They established suitable and achievable goals and legal obligations that were, with notable exceptions, filled in with mostly (though not uniformly) adequate administrative regulations. Those regulations were often undercut, however, by weak financial incentives and penalties. The laws, no doubt, would have been *more* enforceable had they been less ambiguous, with stronger and more certain penalties.

It is interesting, if not particularly instructive, to wonder why Poland's environmental laws and regulations frequently combined stringent legal standards with relatively weak economic standards (fees) and penalties (fines). We can only speculate about the reasons. As we shall see in Chapters 4 and 5, enterprises and their respective ministries exercised a good deal of influence over the entire process of environmental regulation, including the establishment of both legal standards and penalties. That cannot explain, of course, why the legal standards were high but penalties low. There are, however, a couple of reasons we might expect enterprises to have had more success influencing the level of penalties than the substantive legal standards. First and foremost, they may have found it much easier and more efficient to lobby only for low penalties. Legal norms were the most *visible* part of the environmental laws, and the Party/state may have wanted particularly strict norms to show the world that People's Poland was at the forefront of environmental protection. Meanwhile, the impact of those stringent norms could quietly be cushioned by lax enforcement and low penalties. With fees and fines set low enough, enterprises and industrial ministries would not have cared much about relatively stringent legal norms. But this argument proves too much. If the Party/state was only, or even primarily, concerned with image (rather than effective environmental protection), it could easily have established tough-looking penalties along with stringent legal norms. That would have made Poland's environmental laws *appear* even more impressive, but without consequence for socialist enterprises operating under soft budget constraints. (As we shall see in Chapter 5, §5.5, the Party/state regularly reimbursed penalized enterprises with increased budget allocations.)

Although political efforts to undermine legal norms undoubtedly had some effect on financial penalties and resource-use fees, there is, I think, a more compelling explanation: the low levels of fees and fines were incidental (and probably unintentional) consequences of the socialist economic system's endemic inability

to price goods and resources accurately. In the absence of markets, it simply was much more difficult (if not impossible) to determine where fines and fees *should* be set to have the desired impact on polluting behavior and resource consumption.¹⁵ In theory, the authorities could have kept raising environmental charges until they effected some change in enterprise behavior, but, given the soft budget constraints under which socialist enterprises operated, they may have been completely insensitive to price signals at any level. No environmental legislation, however perfect, could have resolved that problem.

It cannot be maintained, in any case, that the laws themselves were the primary cause of the failure of environmental protection in People's Poland. As we shall see in Chapter 7, the 1980 EPDA is still on the books; it has been amended several times since 1989, but remains structurally intact. While work continues (as of this writing) on replacement legislation, the 1980 EPDA appears to be functioning much better today than it did in the former system. That in itself suggests that Poland's environmental protection problems had less to do with what the laws provided (and failed to provide) than with political, economic and social factors that interfered with law enforcement. The next two chapters on, respectively, the politics and economics of environmental law enforcement in People's Poland confirm this view.

Notes

1. For a concise exposition of the regulatory process in People's Poland, see Sommer (1984).

2. It is not possible to compare each and every air quality standard because, for some standards, the two countries used different time averaging. For instance, in Poland the maximum permissible *annual* mean concentration of airborne lead was 2 micrograms per cubic meter; in the United States, the *quarterly* standard is 1.5 micrograms per cubic meter.

3. Polish air pollution emissions standards were most recently amended in 1990 (1990 Dz.U. No. 15, item 92).

4. Of course, in the absence of monitoring capability, it would not matter whether the limits were rational or arbitrary since they would be perfectly unenforceable in either case. According to Dr. Jerzy Jendrośka of the Environmental Law Group at the Polish Academy of Sciences (conversation of July 6, 1992), the lack of monitoring technologies was a major problem for environmental law enforcement in People's Poland: 'the government really had no means of monitoring emissions or determining when emissions levels from any single plant exceeded the maximum.'

5. The ideological underpinnings of Soviet and East European laws on the free use of land and water are discussed in Chapter 6 (§6.4). The Soviet Union finally instituted land-use charges shortly before its disintegration in 1990 (see 1990 Vedomosti SSSR, Issue No. 10, item No. 129, art. 12).

6. This assumption seems warranted by the analysis in Chapter 2. It also accords with the analysis in Mazurkiewicz (1986).

7. The socialist reward structure and its implications for environmental protection are discussed in Chapter 5 (§5.4).

8. Fee levels were increased a couple of times during the 1980s (see, e.g., 1987 Dz.U. No. 41, item 290), but those changes do not affect the analysis.

9. These statistics are discussed in Chapter 5 (§5.3).

10. These reasons are all discussed in various sections of Chapters 4 and 5.

11. For a general discussion of the purposes, methods and uses of administrative sanctions for environmental protection in Poland and the other formerly socialist countries of Europe, see Radecki (1985, esp. chap. 4).

12. This is not to assert either that America originated these legal forms or that the American laws discussed here served as models for Polish law drafters (though they have been generally influential throughout Europe). They are introduced merely to illustrate the form.

13. On civil liability for environmental harm in Poland, see Radecki (1987).

14. For a more extensive discussion of the 'higher necessity' exception from Poland's Penal Code, and its economic interpretation, see Radecki (1981, 220–4).

15. On the problem of pricing in the socialist economic system, see Chapter 5 (§5.4).

Chapter 4

ENFORCEMENT PROBLEMS I: PARTY POLITICS

4.1. The Underenforcement of Environmental Law in People's Poland

Poland's environmental laws and regulations were generally enforceable, but that was not enough to make them effective. Enforceability is a necessary, but insufficient, condition for effective legislation. Enacted laws must actually be implemented and enforced. As the Polish legal scholar Michał Kulesza (1988, 24) has written, 'the best law will be a dead letter unless its fulfillment is secured by appropriate organization, personnel, and financial resources. A legal regulation in itself has no causative force—neither in terms of its initial implementation or its continuing application. Organization and proper outlays are indispensable.' And they depend, in turn, on the state's *political will*; that is, the state must demonstrate a political commitment to enforce its environmental rules.

The failure of environmental protection under socialism was not a failure of law so much as a failure of environmental law *enforcement*,¹ signifying a lack of political will, organization and economic investment. As we shall see throughout this chapter and the next, the Party/state did not sufficiently enforce its environmental regulations against violators. Few lawsuits were filed, and fewer still resulted in judgments against polluters. Party/state authorities failed consistently to assess and collect environmental fees and fines, which consequently had little impact on polluting behavior. The limited potential of Poland's environmental laws was never realized.

In order to explain the failure of environmental protection, it is necessary to explain *why* the laws were underenforced. A conventional explanation is that the Party simply did not care about environmental protection despite its policy pronouncements and legislative efforts; to the extent the Communists were interested in environmental protection at all, the argument goes, it was only for purposes of deception and propaganda. However, as we saw in Chapter 2, this cynical view is not supported by history. The Party had little reason, aside from genuine health and welfare concerns, to make environmental protection a national political priority in the early 1970s. It was under no domestic or international political pressure to enact serious environmental legislation, yet it took substantial pains to do so. Any

propaganda gains from those efforts would have been minimal since, at that time, socialism was widely assumed (including among many capitalist economists) to be inherently less destructive of the environment than capitalism. This myth was reinforced at the 1972 United Nations Conference on the Human Environment in Stockholm, when the capitalist countries of Europe and North America essentially pleaded *mea culpa* for contaminating the planet (see Caldwell 1990, 57). Under the circumstances, the propaganda value of Poland's environmental laws would have been disproportionate to the Party/state's apparent efforts.

This chapter and the two that follow offer an alternative explanation of the underenforcement of environmental law based on systemic features of the socialist economy, governing 'principles' of Party rule, and day-to-day political struggles within the Party/state's administrative bureaucracy. Relevant economic and ideological issues are addressed in Chapters 5 and 6, respectively. The present chapter, meanwhile, focuses on four interrelated 'political' impediments to environmental protection under totalitarian socialism. First, there was continual friction between environmental law enforcement and certain 'legitimacy principles' that served to justify Party rule, most notably the promise of full employment and the commitment to ever-increasing levels of industrial production and economic growth; environmental interests necessarily were sacrificed to the 'greater good' of preserving the regime's legitimacy. Second, those same 'legitimacy principles' led to an unbalanced power structure within the Party/state's administrative hierarchy; industrial ministries and economic planners consistently dominated poorly esteemed, paid, trained and equipped environmental protectors. This was especially and most unfortunately true at the local and regional levels of state administration, where primary responsibility for environmental law enforcement rested. Third, the structure of law enforcement and the judicial system—especially the tremendous (political) discretion of prosecutors and the incompetence of environmental crime investigators—hindered effective enforcement of environmental laws. Fourth and finally, the Party/state stymied effective environmental protection by tightly controlling the flow of environmental information through state secret and censorship laws.

4.2. Absolute Power, Environmental Corruption

To this point I have treated the law seriously as an integral component of environmental protection in People's Poland; indeed, to the extent there was any meaningful environmental protection at all, it came by way of laws and regulations. The fact remains, however, that law under socialism was a pliable instrument of totalitarian politics and economic policy.² Without pressure from (real) competitor parties and (real) public accountability, the significance (or lack of significance) of environmental laws depended almost entirely on the Polish Communist Party's own initiative. As we have seen, the Party/state enacted some

workable environmental regulations, but for various reasons it lacked sufficient commitment to enforce them.

This section describes how the Polish Communist Party's quest for total power contributed generally to the failure of environmental protection. It begins with a historical and ideological discussion of totalitarianism in People's Poland. In practice, totalitarian rule proved to be functionally incompatible with environmental protection.³ State environmental concerns consistently conflicted with certain 'legitimacy principles' of Party rule, including the promise of full employment, based on the Party's supposed representation of the working class, and the ideological commitment to unsurpassed economic productivity and affluence (defined not only in narrow economic terms but more broadly in terms of overall quality of life). These 'legitimacy principles' trumped environmental protection concerns when conflicts arose.

'Socialist Democracy' and Totalitarianism in People's Poland

People's Poland was a totalitarian state founded on the ideological rule of a presumptively infallible party, rather than on the 'rule of law.'⁴ The Polish United Workers' Party (PZPR) held a virtual monopoly on political and economic power in the state. As hegemon, it determined not only what the laws said but whether, and to what extent, they were implemented and enforced. F. J. M. Feldbrugge (1986, 15) has written that under communism 'the spheres of law and politics are not of equal rank; as an instrument of the state, law is subordinate to the Party. Strictly speaking, there does not even exist any sector of law which is independent of the Party and consequently the sphere of law is totally within the sphere of the Party' (see also Rot 1989, 210). On issues not central to Party concerns, the law might be *permitted* to govern without political interference. But what was 'central to Party concerns' could change at any time; new policy directives could override even well-established laws. The Polish sociologist Jadwiga Staniszkis (1992, 81) has noted the lack of legal 'permanence' in People's Poland, where rules were 'subject to continual modification depending on the current interests of the prerogative state,' regardless of parliamentary enactments. This subjugation of law to politics is an inherent feature of totalitarian rule (see Podgórecki 1996, 12–14). By definition, totalitarianism cannot coexist with the 'rule of law,' which, as Leszek Kołakowski (1992, 17) has pointed out, 'simply contradicts the illimitable and arbitrary power of the Party.'

Ironically, the rule of Party over law *was* the law in People's Poland and throughout the Soviet bloc. The rule of Party was codified in the constitutional doctrine of 'socialist democracy',⁵ which has been described as '[t]he paramount feature of the Constitution,' the sum total of all its goals (Sądowski 1976, 81). 'Socialist democracy' was a vacuous concept that could justify, however ambiguously, even contradictory Party/state policies. It had nothing to do with 'democracy'

as that term is commonly understood. Poles used to joke, *What's the difference between democracy and socialist democracy? It's the same difference as between a chair and an electric chair*. 'Socialist democracy' became a euphemism for anything the Party leadership chose to do. As the bearers of ideological truth, any path they chose necessarily led to communism, that is, to perfect democracy. Meanwhile, political activities that deviated from the Party line necessarily led away from communism and, therefore, from true democracy (see *Nowe Drogi*, Feb. 1970). So Poland's Constitution was truly democratic, according to the doctrine of 'socialist democracy,' when it prohibited associations 'whose aim or activities [were] directed against the political and social system' (1952 Dz.U. No. 33, item 232). Adam Łopatka (1980, 35), a PZPR ideologue, explained:

Though the Polish People's Republic is a democratic state, this does not mean it is a liberal one which permits emergence in organized form of all political or social aims and attitudes which actually exist in society. The Polish People's Republic is a state ruled by the dictatorship of the working class, it attaches the highest rank of importance to the aims and interests of the working people which it represents and fulfills. The state takes all necessary measures to prevent class enemies of the working people carrying out their aims and purposes, judging them to be socially harmful and detrimental, not only to the working people, but to the whole nation.

The Polish People's Republic excludes the possibility of organized opposition to the socialist system and the policy conducted by the state leadership in any form whatsoever. It also excludes the possibility of opposition groups of any sort and kind taking over political power from the Polish United Workers Party and allied parties, in the belief that this would threaten the most vital interests of the working class and nation as a whole. The people did not take over responsibility for the country's future by revolutionary means, only to hand it back again to those classes and social strata which brought the Polish nation to the very brink of biological extermination—classes and strata which in actual fact no longer exist today.

If the Party ever discovered that legal rights, such as the constitutional guarantees of free speech and free assembly (1976 Dz.U. No. 7, item 36, art. 85), conflicted with its current conception of 'socialist democracy,' it could simply and justifiably dispense with those rights. Current Party policy, as the embodiment of 'socialist democracy,' prevailed over the law (see Kamiński 1991, 28). This was, of course, consistent with Lenin's conception of a proletarian dictatorship unfettered by (inherently bourgeois) legal constraints (see Parkin 1979, 180).

Although the principle of 'socialist democracy' justified direct Party governance, the PZPR rarely sought to rule Poland directly; it preferred to operate behind the façade of the state structures it created and indisputably controlled. The reasons for this were more instrumental than ideological. By separating itself from the government while retaining control over government policy, the Party

could evade responsibility for policy failures. Thus, for example, the Party could maintain that environmental protection was its—and, therefore, the nation's—top priority even while state enterprises and industrial ministries flouted environmental rules. Only in times of political crises—during Martial Law for instance—did the Party ‘take over’ the government. However, the Party and state never constituted ‘a dual structure of power,’ as some (such as Groth 1972, 25) have maintained. It may have been a dual structure of *government*, but there was no real bifurcation of *power*. Even when the Party strategically divorced itself from day-to-day governance, as it did following Party Plenums in 1963 and 1967 (see Taras 1984, 83), this did not constitute a delegation of Party power to state authorities; ‘all important political decisions’ continued to be taken ‘outside of the state organs,’ that is, by the Party (Pusylewitsch 1986, 319). Each government department had a counterpart or mirror in the Party apparatus, and substantive government decisions had to be preapproved by the relevant department of the PZPR's Central Committee. So any separation of functions between Party and government was more apparent than real. As Marian Rybicki (1982, 41) has observed, the Party, in effect, constituted a super-government (see Pusylewitsch 1986, 322). That is why I refer to the former Communist regimes as ‘Party/states.’

State institutions were well designed to serve the Party's interest. The institution of central economic planning gave the Party plenary control over the national economy; high-ranking Party officials ultimately decided all important economic issues concerning resources allocation, production targets, prices, wages and bonuses.⁶ The Party controlled access to a quarter of a million positions at all levels of government, industry and the media through the infamous *nomenklatura* system of privilege and promotion;⁷ anyone wishing to serve in any branch of government, including environmental protection, could do so only with the Party's blessing. Within its own ranks, the Party leadership maintained strict control over the rank-and-file through the pyramidal structure of the Party and the constitutional principle of ‘democratic centralism.’ To Western eyes, this Leninist principle may appear oxymoronic, as the very concept of democracy suggests diffused rather than centralized power. However, all political systems, even open and democratic societies, impose limits on democratic participation to enable effective governance. In the American and West European systems, democracy is limited through the process of electoral representation and rules of legislative (or parliamentary) procedure that control debate, ensuring that decisions ultimately will be taken. In theory, ‘democratic centralism’ is simply another approach to the same problem: all members of the Party may participate in policy discussions; these discussions inform decision makers at the highest echelons of the Party hierarchy (as representatives of the rank-and-file); the Party leaders then make the decisions, which bind all beneath them in the Party pyramid. However, the phrase ‘democratic centralism’ is ambiguous at best. It does not tell us how to balance the two extremes of untempered democracy and complete centralization of decision making. For that, we must look to the practice of socialist coun-

tries. In People's Poland and throughout the Soviet bloc, the balance was struck consistently far to the 'centralism' end of the continuum. In the application of 'democratic centralism,' the term 'democratic' came to mean nothing more than limited and often meaningless discussion by Party members at various levels. Decisions were taken at the top, and Party leaders could reach decisions however they pleased, for any reason or no reason at all. The only effective limitation was that the decision makers had to be careful to preserve sufficient support within Party ranks to ward off potential intra-Party rivals. 'Democratic centralism' in practice proved to be a tool of pure authoritarianism (much as Leon Trotsky predicted it would when Lenin first enunciated the principle: see Waller 1981, 28). In the Soviet Union, it led inexorably to Stalin's 'cult of personality.' In Poland, it led to what Gramsci called 'bureaucratic centralism,' a condition in which the Party leadership becomes 'a narrow clique which tends to perpetuate its selfish privileges by controlling or even stifling the birth of oppositional forces' (Hoare and Nowell-Smith 1971, 168). This was, in fact, the precise purpose of 'democratic centralism.' Party leaders sought to maximize Party unity by quelling internal dissent that, if left unchecked, might have led to the formation of factions. Chapter 3, article 19, of the PZPR's party statute clearly articulated this purpose:

Internal party democracy and the freedom to discuss and criticize cannot be hindered and limited, but equally they cannot be taken advantage of for purposes conflicting with the ideology and policy of the party as well as its political and organizational unity. Particularly inadmissible are activities of a fractional character, which depend upon the formation of a formalized group within the party which popularizes a separate program, political line, or organizational principles and which forms an autonomous, discretionary center in relation to the statutory party authorities. (Translated in Stanford 1984, 343)

Factions were considered dangerous because they tended to weaken the Party, rendering it susceptible to outside challenges. While the Party struggled to extinguish (or co-opt) external political opposition, it could hardly have been expected to tolerate dissent and opposition within its own ranks. Totalitarian mechanisms had to be applied internally as well as externally to ensure the Party's—and the system's—survival.

Environmental Protection and the Party's 'Legitimate' Claim to Power

Much has been written about Communist parties and their tendency to devolve from institutions promoting the advent of communism into giant, self-sustaining holding companies of political and economic privilege (see, e.g., Clark and Wildavsky 1990, esp. chap. 6). In Poland, the Party's overriding concern was to perpetuate and maximize its own political and economic rule. All other goals and

aims of the socialist state, including environmental protection, were subordinated to that paramount self-interest. This was true, of course, throughout the Soviet bloc. In the Czech Republic, a 1990 report prepared for the Ministry of the Environment (Vavroušek 1990, 13) concluded that '[t]he primary goal of the CPC [Communist Party of Czechoslovakia], unambiguously superior to all other goals, was, from the beginning, to build up and consolidate totalitarian power.'

Ironically perhaps, the Party's overriding concern with self-preservation imposed certain constraints on what the Party itself could do. As Leszek Kołakowski (1992, 12) has written, 'a totalitarian communist regime could not survive without taking its legitimacy from the ideological principles that established its place in history and its unlimited rights to keep its subjects in eternal serfdom and to expand as much as feasible.' The Party could justify its continued monopoly on political and economic power only so long as it adhered to the ideological principles that legitimized its rule. In this respect, ideology continued to be vitally important in People's Poland and the entire Soviet bloc long after almost everyone stopped believing in it (accord Pakulski 1987, 140). Certain features of the Marxist-Leninist ideology—what I call 'legitimacy principles'—continued to serve as justifications for Communist Party rule. They included (at least) the following three principles: (1) the socialist system's claimed potential to achieve greater economic efficiency and levels of production than capitalism; (2) the promise of full employment, codified in the constitutional right to work; and (3) the commitment to egalitarianism and social welfare. These principles were important not so much as ends in themselves but as means to the end of justifying Party hegemony; they served to legitimize Party rule (at least for the Party itself). Conflicting social or economic policies simply had to be sacrificed for the greater good of Party survival. As Hannah Arendt (1973, 462) noted, the higher legitimacy principles flowing from the totalitarian regime's ideology trumped 'petty legality.'

Indeed, that is precisely what happened whenever environmental protection concerns conflicted with the legitimacy principles of maximal economic production and full employment. Environmental interests simply could not compete—which is not necessarily to say that the Party was acting disingenuously when it adopted environmental protection as the nation's foremost political priority at its 1975 Seventh Party Congress. The addition of environmental provisions to the Constitution in 1976 and enactment of substantial environmental protection and land-use legislation in the 1980s suggest, on the contrary, that the Party sincerely sought to improve environmental protection. And it would be a mistake to view the 'legitimacy principles' of maximal economic production and full employment simply as *competing interests* of the Party/state, on a par with environmental interests. They were ideological imperatives that constituted the Party's very reason for existence.⁸

To maximize economic production was *the* paramount goal of the socialist economic system (see Goldman 1972a, 189; Sommer 1991, 109), mandated (initially) by orthodox Marxist theory that premised the socialist system's 'supe-

riority' to capitalism, at least in part, on its greater economic potential (see, e.g., S. Gomulka 1986, 42; Grundmann 1991, 147). This ideological imperative, as glossed by Lenin and Stalin, became 'the Soviet-type development strategy,' which was imposed on Poland and the Soviet Union's other Central and East European satellites at the close of the 1940s. The engine of growth in that strategy was heavy industry (see Fallenbuchl 1970, 458–60). The state became the 'instrument of the Party *par excellence*' (Rensenbrink 1988, 59); its administrative structures and centrally planned economic system were all designed to foster heavy industrial production.

I have much more to say about the nature of economic production under socialism and the socialist reward system in Chapter 5, and in Chapter 6 I discuss some of the ideological bases of socialism's production bias in the writings of Marx, Engels and Lenin. For now, the important point is that the supposed productive superiority of the socialist system supported and legitimized, at least initially, the Communist Party's claim to power. As Barbara Jancar (1987, 123) has written (of the Soviet Union and Yugoslavia), '[t]he whole concept of the leading role of the party rests on the premise that the party knows best how to increase material abundance in preparation for the eventual advent of communism.'

In Poland, up until the mid-1960s, the PZPR could claim some legitimacy from socialism's presumed productive superiority, as Poland's development gap with the West narrowed. However, Poland's rate of growth soon began to fall, and by the middle of the 1970s socialism's supposed inherent economic superiority was exposed as a myth. Nevertheless, production rates continued to dominate environmental protection interests. Unconvincing Party rhetoric still spoke to the superior productive potential of socialism, but from that time to the end of the Communist era the primacy of production was justified by reasons of national economic necessity (meaning survival) rather than reasons of ideology. Meanwhile, the various state and administrative structures established during the Stalinist period to support industrial production remained in place.

The effect of Poland's industrial production bias on environmental protection activities was predictable. Environmental law enforcement simply was not permitted to interfere with production that the Party/state considered centrally important (see Gustafson 1981, 115). As I indicated in Chapter 3 (§3.5), the authorities never closed down or suspended production at enterprises for purely environmental reasons; economic production was always the paramount consideration. This explains why, for example, socioeconomic plans consistently dominated land-use plans. As a legal matter, land-use plans were supposed to have equal and, in some cases, greater weight, but, in practice, they frequently were ignored; many, if not most, economic development activities went forward without regard for environmental consequences.⁹ Some (such as Jendroška 1993b, 105–7) have argued that this was largely a function of power relations within the administrative hierarchy, where industrial interests dominated environmental interests. However, as we shall see in the next section of this chapter, those power relationships them-

selves were consequences of the Party/state's production bias. And as we shall see in Chapter 5 (§5.4), the basic reward (wage/bonus) structure of the socialist economic system also promoted production over environmental protection.

If production was the paramount goal of the socialist economic system, full employment was the Party's supreme legitimacy principle, the key platform that distinguished the self-appointed 'workers' party.' Only the Communist Party promised employment to each and every citizen. Indeed, one of the few meaningful individual rights guaranteed by Poland's Communist Constitution was the right to work (1976 Dz.U. No. 7, item 36, art. 68, as amended). Unlike most other rights supposedly (but not actually) secured by the Constitution, the right to work consistently was interpreted to impose an actual 'duty' on the state to secure jobs for all citizens (see Matey 1978). People's Poland labelled itself a 'workers' state,' and its leading political force, the Polish United Workers' Party, could hardly claim to represent the working class if it did not espouse the right to work.

The right to work had various consequences for environmental protection in the Party/state. Although a commitment to full employment need not conflict with environmental protection, the two goals certainly did conflict in People's Poland. In 1983, the Polish government adopted a plan for achieving compliance with state air pollution standards in the heavily industrialized and polluted Katowice voivodship. In order to achieve compliance, region-wide emissions had to be reduced by more than 90 percent. According to a report issued by the International Labour Organization (1989, 11–12), that plan was scrapped after the authorities determined that it would cost more than 1 million jobs in the region. It simply was not possible for the Party/government to guarantee full employment while enforcing diligently its environmental laws. To a significant extent, environmental law enforcement was sacrificed to the 'greater good' of full employment.

Throughout the Soviet Bloc, the environmental consequences of the 'right to work' were not just theoretical or statistical. The best illustration comes from Siberia where, according to the dissident writer Ze'ev Wolfson (Boris Komarov [pseud.] 1980, 69–70), cities of felled trees were left rotting by the train tracks, waiting for trains that never came. A Deputy of the Supreme Soviet rationalized this wastage by raising the constitutional right to work: 'There are people out there in the taiga and they have to be paid their wages. We set up the lumber camp and brought people there. They have the right to work, and they are not responsible for our problems with the railroad cars.' The effect, for Wolfson, was to 'pervert the very notion of work,' persuading the loggers that 'turning the majestic cedar woods into mold and rot was a decent job.'

Environmental Protection and the Party's Illegitimate Abuse of Power

Environmental law enforcement in People's Poland was hindered not only by fundamental legitimacy principles of Communist Party rule but by personal and

bureaucratic corruption. Such corruption is endemic to totalitarian regimes, which, by definition, exercise power without accountability. Unfortunately, the lack of accountability also made acts of corruption difficult to trace, but a few cases did come to light in People's Poland. One particularly illustrative case, recounted by Maria Łoś (1988, 162–3), concerned the construction of Poland's giant Katowice Foundry in the mid-1970s. The project's stated goal was environmental: to replace several obsolete and highly polluting foundries with a single new one that would be cleaner and more efficient. That ostensible purpose masked ulterior personal motives of Party leaders in the Gierek Administration. Gierek's Deputy Minister of Metallurgical Industry, in particular, was determined 'to leave a lasting monument to commemorate his triumphant career.' So he chose his birthplace in the Katowice region as the site for the new foundry, without regard for environmental conditions or consequences. In fact, the chosen location was just about the worst possible from both environmental and economic perspectives. The foundry site was economically inefficient because it was located far from lines of transportation connecting it to the mines that supplied its raw materials. And the area was unsuitable environmentally because it was already highly industrialized, congested and polluted. The new foundry added to existing environmental problems; it 'deprived the neighboring, highly populated area of drinking water . . . and devastated the green belt created purposefully to improve air quality' in the region. The Deputy Minister obviously was unconcerned with such details. Not only was the foundry constructed outside of existing land-use plans, it was not even included in national or regional socioeconomic plans. The entire 500 billion zloty project was designed and constructed outside of the law. A similar episode occurred in 1988, just before the end of communism in Poland, when the Deputy President (Vice-Mayor) of Warsaw negotiated an agreement with a West German-led consortium to build a new international airport (Okęcie II). Warsaw city officials agreed, without legal authority, to waive statutory environmental conditions for the project.¹⁰ The Katowice Foundry and Okęcie II Airport episodes were neither unique nor common. But they exemplified the status of law under communism.

4.3. Industrial Interests versus Environmental Protection in the Party/State's Administrative Hierarchy

The Party/state's predominant concern for industrial production and full employment also helps to explain another contributing factor to the underenforcement of environmental law in People's Poland: the utter domination of environmental officials by industrial ministries and even enterprise managers. Administrative posts with responsibilities related to the Party's 'legitimacy principles' were quite naturally more powerful and prestigious than positions in ministries dealing with issues of secondary concern, such as environmental protection. Environmental officials were, in comparison, poorly trained, equipped, paid and esteemed. When

interministerial conflicts or disputes arose—and they arose often—power and prestige mattered a great deal. Such conflicts were resolved not according to specific legal mechanisms or administrative procedures, but by intra-Party politics, with the same result in most cases: environmental law enforcement was subordinated to industrial and economic interests. Sometimes the stakes were enormous, as in 1972 when the Central Water Management Board was abolished in the wake of a reputed intra-Party rivalry. But in most cases the political subordination of environmental protection interests may or may not have been deliberate Party policy. It was, however, a predictable by-product of the Party/state's administrative structure (see Kabala 1993a, 55–6).

Where environmental protection was concerned, Poland's industrial ministries most often exercised their clout to avoid economic charges levied under the 1980 Environmental Protection and Development Act. As previously discussed in Chapter 3 (§§3.3 and 3.4), environmental fees and fines were designed to induce enterprises to reduce pollution emissions and conserve resources. But collections often were impeded or undermined by political interference from industrial ministries, enterprise associations and central planners. Enterprises and their supporters in the Party/state's administrative hierarchy frequently lobbied the Minister of Environmental Protection to waive assessed fees and fines, complaining that they could not avoid violating environmental standards because the central authorities failed to allocate funding for environmental protection installations. This was a legitimate complaint. Environmental investments depended, in the first instance, on administratively allocated resources. If the center did not provide the necessary funding for environmental improvements, how could enterprises be expected to comply with stringent environmental standards? In the face of such a patently reasonable argument, the relatively powerless environmental protection officials could do little but waive the penalties. Occasionally the Environment Minister held firm and refused to rescind assessed fees and fines, but even then the effect often was blunted by planning authorities, who regularly compensated penalized enterprises with increased budget allocations or tax deductions (see Taga 1986, 75). Article 110, section 4, of the 1980 EPDA expressly prohibited the state from compensating self-financed enterprises (*rozrachunek gospodarczy*) for environmental charges. But this provision was largely unenforced and, in any event, it did not apply to the vast majority of polluting enterprises in Poland that were not self-financed. There is no question that the Party/government *could* have made environmental fines stick, for example by applying them against enterprise bonuses. The fact that the Party/government did not do so signifies its inability or unwillingness to put its own house in order. It could not (or would not) balance the powers within the administrative structures it created and indisputably controlled. The Party could have strengthened environmental protectors within the administrative hierarchy, but perhaps only by renouncing some of its own 'legitimacy principles.' That, however, was unacceptable for the obvious reason that it would have weakened Party authority.

4.4. Environmental Law Enforcement and the Judicial System

The Polish judicial system played a central role in environmental law enforcement. The 1980 EPDA created duties and liabilities for environmental protection, incorporating provisions from the Civil and Criminal Codes (see the discussion of environmental duties and liabilities in Chapter 2, §2.5), and article 100 of the EPDA authorized officially sanctioned organizations to file lawsuits against polluters. These enforcement mechanisms presumed a court system that would apply the laws and penalize violators.

Prior to the 1980 EPDA, Polish courts heard very few environmental cases; of 4,754 civil cases brought between 1978 and 1980, only 117 were on matters relating (broadly) to environmental protection (Jendrońska and Nowacki 1991, 46). After the 1980 EPDA was enacted, the number of environmental complaints received by prosecutors grew, but they did not lead to more criminal and civil prosecutions. In 1982, regional and local environmental protection authorities notified prosecutors of 110 criminal violations of the EPDA and other environmental laws, but formal charges were filed in only nine cases, and four of those cases subsequently were dismissed (Mykietyn and Radecki 1985, 27). Even though the EPDA clearly was intended to increase criminal and civil liabilities for environmental offenses, relatively few cases ever made it into court. This was a combined consequence of direct and indirect political interference in judicial affairs and the sheer incompetence of environmental law enforcement investigators.

The Party and the Courts

Politics intruded into the daily conduct of the judicial system by design. Totalitarianism could not, after all, tolerate a truly independent judiciary. As the Italian legal scholar Mauro Cappelletti (1985, 8) has written, ‘no effective system of judicial control is compatible with, and tolerated by, anti-libertarian, autocratic regimes, whether they place themselves at the left or the right of the political spectrum.’ In People’s Poland, judges were declared by the Constitution to be ‘independent’ (1976 Dz.U. No. 7, item 36, art. 62), but that was nothing more than propaganda. For one thing, it was effectively contradicted by other constitutional provisions stipulating that the courts were to be ‘custodians of the social and political system of the Polish People’s Republic’ (1976 Dz.U. No. 7, item 36, art. 58), which implied that the courts had political and social obligations beyond their nominal judicial responsibilities. Poland’s Constitution also provided that no right or authority could be exercised contrary to the socialist aims of the Polish state; and those aims were determined exclusively by the Polish Communist Party, the constitutionally anointed ‘leading political force of society in the building of socialism’ (1976 Dz.U. No. 7, item 36, art. 3, sec. 1). Ultimately, it did not matter whether the Constitution guaranteed judicial independence for, as we saw

in Chapter 2, the Constitution itself was without direct legal force. Constitutional provisions were not self-executing, but required activation by parliamentary legislation (see M. Brzezinski 1993a, 167; Frankowski 1987, 1312–13). This was confirmed in 1955, when the Polish Supreme Court ruled that ‘[c]onstitutional norms . . . [are] unsuitable for direct practical application in the everyday life of society without being expanded in ordinary statutes and other normative acts’ (quoted in M. Brzezinski and Garlicki 1995a, 24). Mark Brzezinski (1993a, 168) has noted that this ruling placed the legal status of the Constitution beneath that of ordinary legislation and even administrative regulations (also see Frankowski 1988, 743). More accurately, I think, it meant that the Constitution had no real ‘legal’ status at all.

Regardless of the Constitution, the reality was that everyone working within the judicial system, including judges, was subject to various legal, political and economic means of Party control. Not only was this true during the Stalinist era, but it persisted to the end of communism in Poland. All judicial positions were within the *nomenklatura* system, which gave the Party substantial leverage over the entire court system.¹¹ As usual, the main qualification for these posts was Party loyalty, rather than legal education, acumen or experience. It was possible for non-Party members to become judges, but one could not become or long remain a judge without acquiescing to the PZPR. Supreme Court judges were appointed for five-year terms, renewable subject to a favorable political evaluation by the Minister of Justice and the Council of State. A judge could be dismissed in mid-term if his or her performance or political reliability was found lacking; this was the Party’s means of disposing of pro-Solidarity judges in the wake of Martial Law, for example (see Łoś 1984, 196). Politically reliable judges decided cases not just on the basis of law but also by applying general policy guidelines and, sometimes, specific instructions from higher Party organs and officials. Party pronouncements were on a par with statutes, regulations and other sources of ‘law’ (Groth 1972, 42; Łoś 1988, 49); any judge who disregarded them was subject to dismissal and, at least during the Stalinist period, possible imprisonment for violating ‘the people’s legality.’ Throughout the history of People’s Poland, the judges’ first responsibility was ‘to conscientiously fulfil their duties to the party’ (quoted in Torńska 1987, 51). To ensure that they did, the Party maintained an office within each court (and in every other law enforcement body) (Łoś 1988, 154). Court activities were monitored closely so that the Party knew when judges acted independently of the Party line. Maverick judges were quickly and publicly reprimanded for deviating from ‘the class approach to the administration of justice’ (W. Gomułka 1959, 147).

In case these political controls proved insufficient, the Party also grasped the judiciary by the pocketbook. Judges’ incomes were not fixed by law, so they could be—and were in fact—manipulated according to political criteria (Kurczewski 1993, 70). The salaries of Polish judges were tied to performance indicators, such as conviction rates and total fines levied in a year (Łoś 1988, 49). Another

important performance indicator was a judge's level of servility to Party bosses; a better-behaved judge was likely to be a better-paid judge. Judicial salaries were low to begin with, reflecting the relatively low social status of judges in the socialist system. According to government statistics, in the 1980s Polish judges earned on average 5 percent less per month than middle-level prosecutors and 40 percent less than the General Procuracy (see Kurczewski 1993, 78). The fact that the system valued prosecutors more highly than judges was entirely consistent with the socialist theory of justice. As Inga Markovits (1978, 626) has put it, '[a] socialist figure of justice would not be blindfolded, but seeing, and she would show the way with outstretched arm and pointing finger.'

Direct Political Interference in Environmental Cases

Despite the fact that PZPR controlled the judiciary, it should not be assumed that the Party habitually interfered with judicial proceedings. In environmental cases, at least, there seems to have been relatively little *direct* Party interference. Some environmental investigations and cases may have been intentionally derailed, though evidence of tampering is hard to come by. Certainly, Party influence could have been brought to bear in rather subtle ways. For example, in 1985 the League for Nature Conservation, an officially recognized but nominally independent organization, sued a plant in Szczeciń (in western Poland) under article 100 of the EPDA to enjoin its emissions of toxic air pollutants. The court declared that it did not know enough about environmental protection to decide the matter, so it ordered the plaintiff to provide an environmental expert for the court's benefit. The League could not afford to hire an expert, so it had to drop the suit. Was this a case of political interference? Perhaps, *if* the court knew in advance that the League could not afford to hire an expert and so would have to drop the case. Anyway, the court probably should have known that its order would have a chilling effect on other environmental plaintiffs. If the Nature Conservation League's case *was* politically determined, it goes to show just how subtle Party influence could be in the judicial process. The PZPR never had to announce its position (if it had one) publicly to ensure a certain result; it did not have to leave a paper trail of memoranda or letters. A quiet behind-closed-doors comment or phone call was usually the most that was ever required, and in many cases even that was unnecessary. The system itself was designed so that judges, prosecutors and law enforcement investigators simply understood how certain circumstances should be treated, without shedding the façade of fairness and impartiality.¹²

In addition, there were purely legal means for resolving political cases. In Chapter 3 (§3.6), I discussed various exceptions and exclusions from liability in Polish law. Foremost among them was the 'higher necessity' exception from article 23 of the 1969 Penal Code (1969 Dz.U. No. 13, item 94). A prosecutor could suspend any criminal suit or investigation, on his own initiative or on the

recommendation of Party superiors, simply by deciding that the activity causing the environmental violation was of overriding importance to the national economy. This constituted a final decision terminating all proceedings, usually even before formal charges were filed. The 'higher necessity' ruling was not subject to judicial review, and it did not have to be published. And though it applied only to criminal cases, there were other legal mechanisms for avoiding liability in civil and administrative cases. Specifically, the courts employed balancing tests, which weighed the individual's interest in seeking civil or administrative redress against society's interest in the polluting activity. These balancing tests served the same purpose as the 1969 Penal Code's 'higher necessity' exception. With such simple legal mechanisms for avoiding politically (and economically) troublesome environmental cases, the Party had little need to resort to extra-legal methods.

Still, the extent of (direct or indirect) political interference in the adjudication of environmental cases should not be exaggerated. Cases that made it into court usually were decided strictly by the book. Indeed, the very fact that a case made it into court suggested that the Party was not overly concerned, so the law could be permitted to govern. Wojciech Radecki (1991a) collected criminal, civil and administrative environmental law cases from the 1970s and 1980s in a single slim volume. Some of these cases demonstrated the real potential of Poland's environmental laws. For example, in 1982 the Supreme Court required a chemical storage facility to dig a new well for neighboring residents after the plant contaminated their existing water supply (see Radecki 1991a, 65–6). In 1986, the High Administrative Court upheld a fine against a regional waterworks and sewage company for water pollution discharges. The company argued that the fine should be rescinded because it did not generate the sewage in the first place, it was not provided with funds to install equipment to treat the sewage, and its discharges were necessary and unavoidable. But the court found those arguments irrelevant because the law was not fault based; so long as the company discharged the waste that caused the harm, it was liable (see Radecki 1991a, 17–18). The High Administrative Court almost never rescinded environmental fines despite repeated protests from polluters that the fines were contrary to 'social justice' because they were technically unable to comply with the regulations (see Radecki 1991a, 22–5).¹³ In these and many other cases, the courts dutifully applied and enforced the environmental laws and regulations. So, Poland's environmental laws *could* be effective; the main problem was getting cases into court.

The Incompetence of Environmental Law Enforcement Personnel

Political interference was neither the only nor the predominant impediment to judicial enforcement of the environmental laws. A more common problem was the sheer incompetence of environmental law enforcement personnel and judges. This was to some extent an indirect (and perhaps unintended) consequence of

the Party/state's dedication (for ideological and practical reasons) to industrial production and full employment. The best and brightest young *aparatchyki* were attracted to better-paying and more prestigious positions in the Party hierarchy, industrial ministries and planning bureaus. Incompetency was also an endemic by-product of the *nomenklatura* system, which valued Party loyalty over education, experience and talent. Consequently, many judges, prosecutors and law enforcement personnel lacked the necessary skills to handle complex and technical environmental cases. We have seen (in the 1985 Nature Conservation League case) how lack of competence could affect the outcome of environmental lawsuits; the average judge in People's Poland was poorly equipped to deal with technical and complex environmental law issues. This added to the plaintiffs' burden: not only did they have to prove their cases, but they had to educate the judges about the law and environmental science at the same time. Incompetence was an even greater problem at the initial law enforcement level. Many of those responsible for investigating and reporting on environmental complaints simply lacked the skill and experience to gather evidence carefully for trials, and their lack of competency killed many cases before they ever reached the courts; reports were so legally or factually defective that prosecution became impossible. Karol Mykietyn and Wojciech Radecki (1985) investigated the disposition of 32 criminal complaints filed in 1982 for violations of environmental rules. Among the legal problems they catalogued were reports of environmental violations based on repealed regulations and investigations that failed to establish the elements of a statutory offense. Many reports were factually incomplete, lacking such vital information as responsible parties, causes and test data on environmental damage. For example, in 1982 a complaint was filed in Gorzów Wielkopolski about a fish kill in the Warta River, but the investigator's report neglected to identify the perpetrator; the prosecutor who subsequently received the report had no idea whom to prosecute. A similar case in Ostroda could not be prosecuted because investigators failed to take samples of the polluted water or dead fish; there was not enough evidence for the prosecutor to prove a violation of the environmental laws. In Cieszyn, investigators filed a report about contamination of the Wisła (Vistula) River, but failed to include any information about the perpetrator, the extent of damage or the level of threat posed by the contamination. In none of these cases did investigators consult the State Environmental Protection Inspectorate, despite its (supposed) competence and legal responsibility to cooperate with local and regional authorities in environmental investigations. On the other hand, in the few cases where environmental inspectors did participate, they too seemed blissfully unaware that the purpose of their investigations was to gather evidence for criminal trials. These problems so severely impeded effective environmental law enforcement that in 1984 Poland's Chief Prosecutor recommended that environmental investigations be taken over personally by regional and local prosecutors, with the assistance, when necessary, of environmental experts (Mykietyn and Radecki 1985, 27, 30–1, 39). This recommendation was never implemented, but

it probably would not have made much difference anyway; the number of environmental complaints leading to successful prosecutions would likely have stayed about the same. Perhaps prosecutors would have done a better job of collecting evidence for trial, but given their other responsibilities they would have had much less time to spend investigating and reporting on environmental complaints.

Lack of competence was also a problem within regulated enterprises. Workers with pollution control responsibilities were underpaid and underappreciated, compared with workers with 'productive' responsibilities. Environmental protection activities were not considered 'productive' because they did not contribute to the achievement of plan production targets. On the contrary, environmental efforts tended to impede the fulfillment of plan targets, jeopardizing enterprise 'profits,' in the form of bonuses that could amount to one-half or more of managers' and workers' annual salaries.¹⁴ In addition to being 'unproductive,' environmental protection activities were largely unnecessary from the enterprise point of view because penalties for non-compliance almost always could be avoided (through the political mechanisms already discussed). So environmental protection responsibilities were seen as little more than a nuisance to be avoided.

Pollution control responsibilities typically were given over to untrained functionaries—the less competent the better, from management's perspective. According to a 1979 report, 25 percent of air-polluting plants in Poland had no employees with special training in environmental engineering (*Wiadomości Statystyczne*, Dec. 1979). John Kramer (1983, 214) tells a story about a worker in Czechoslovakia who was publicly honored for his contribution to energy conservation after he shut off power to his plant's pollution-control equipment. That could be a tall tale, but it contains more than a hint of truth. In fact, during energy shortages in Poland, when enterprises were required to reduce their power consumption, pollution-control equipment was always switched off first (see *Nowe Drogi*, July 1980).

4.5. Environmental Information, State Secrets and Censorship

The very nature of totalitarianism determined that the Party/state would strictly control access to information, including environmental information. After all, in the history of the world no totalitarian regime ever has coexisted with a free press. In People's Poland, the Communist authorities started from the position that everything was a secret unless publication was expressly authorized. Information was allocated, like other resources in the Party/state, from the center. That was true even for information circulating within the administrative bureaucracy. Ministries rarely exchanged information voluntarily; industry officials and enterprise managers certainly did not willingly provide environmental protection officials with information about pollution emissions levels. Barbara Jancar (1987, 163) has referred to this as a 'game of "territory."' Prior to the 1970s, access to environmental information was largely irrelevant since there was little use-

ful environmental information worth publishing. The Polish Party/government first began gathering environmental information during the early 1970s, but the information obtained in those early studies was distorted by the incompetence of investigators and the poor quality of their monitoring equipment.¹⁵ As we have seen, the training and skill of environmental investigators left much to be desired, and the technology they had to work with was vastly inferior to Western environmental equipment. To measure ambient air pollution, for example, they used mostly hand-held instruments that were not uniformly calibrated (Nowicki 1992, 211). There were no regional or national air and water quality monitoring systems, although People's Poland was the first (and only) country in the Soviet bloc to undertake 'substantive initiatives' to create such a network in the late 1970s (see Kramer 1983, 205; *Express Wieczorny*, Oct. 15, 1979). Enterprises were responsible for reporting emissions levels, but underreporting was universal and rarely detected. Environmental inspectors had a difficult time proving underreporting because enterprise managers typically knew (through channels) when inspectors were coming. Before investigators arrived, enterprises would alter their production patterns to minimize pollution emissions; then, as soon as the inspectors had left, ordinary production would resume. Finally, Poland's environmental protection agencies had no uniform standards for compiling and interpreting the information their investigations did obtain (see *Wiadomości Statystyczne*, Dec. 1979).

What little environmental information existed was legally treated as a state secret. A government decree from the 1970s provided that:

All information pertaining to any immediate threat to the life and health of people caused by industry and by chemicals used in agriculture must be eliminated from all reports on environmental protection and on the threat to the natural environment in Poland.

This ban applies to specific cases of the pollution of the atmosphere, water, earth, and food dangerous to life and health. (Quoted in translation in Hauser 1984, 49)

In her book on censorship in Poland, Jane Leftwich Curry (1984, 219–20) quoted several other Polish regulations limiting the flow of environmental information. One prohibited the publication of information about Polish water-polluting activities, while expressly authorizing the publication of information about water-polluting activities in neighboring Czechoslovakia. Others concerned information about specific episodes, suppressing reports that otherwise might have been taken 'as evidence of far broader problems' of environmental degradation in People's Poland. One particularly absurd regulation issued in 1975 permanently embargoed information about a denuded forest within Warsaw city limits that many Warsaw residents saw every day on their journey to work. Nevertheless, information about the forest was a state secret and publication was a crime. Indeed, it was a crime even to refer to 'censorship' (*cenzura*) because it too was a state secret (Hauser 1984, 50).

'Criminals' charged with illegally publicizing environmental information were usually tried before the *kolegia*, Poland's notorious lay courts. As we learned in Chapter 2 (§2.6), the *kolegia* heard misdemeanor cases brought under the 1971 Petty Offenses Code (1971 Dz.U. No. 12, item 114). Professional judges, attorneys and prosecutors were prohibited from serving on *kolegia* by regulation of the Minister of Internal Affairs (1959 Dz.U. No. 15, item 81). Consequently, the *kolegia* were virtually devoid of legal process and, for all practical purposes, the possibility of acquittal. By the 1980s, there were approximately 500 *kolegia* (at various levels of administration), deciding half a million cases each year. They were by no means an insignificant part of judicial administration in People's Poland. Most *kolegia* cases concerned 'public order' offenses, including illegal assembly and illegal distribution of information, including environmental information. Someone accused of distributing secret environmental information, however insignificant, could be fined and thrown into jail; if they used their car to transport and distribute the illegal information, it could be confiscated (see Andrzejewski and Nowicki 1991).

It needs to be stressed, however, that Party/state censorship of environmental information was neither complete nor consistent. Beginning in the late 1970s, Poles had fairly regular access to detailed accounts of ecological damage and critiques of environmental policy in the popular press. In July 1978, for example, the Party monthly *Nowe Drogi* published an article detailing environmental problems, including statistics on air pollution emissions, water pollution levels and land degradation. In March 1981, the Warsaw daily *Słowo Powszechne* reported on a conference organized by the Scientific Committee 'Man and the Environment' of the Polish Academy of Sciences. The article reported on 'ecological scandals' threatening the health of Poland's children, criticized the 'complete insensitivity of the decision makers regarding ecological problems,' and concluded that 'economic reform in Poland is taking the wrong course because it does not take into account the ecology crisis that is rapidly worsening in Poland.' Even during the period of Martial Law, detailed accounts of environmental problems and policies continued to appear in Polish newspapers. For example, on November 24 and 25, 1982, the Warsaw daily *Życie Warszawy* published a series of articles concerning environmental protection. The reports provided detailed economic and environmental statistics, and referred to 'ecological disaster' areas in Silesia, Płock and Wałbrzych. That same month, Poland's national newspaper *Rzeczpospolita* (Nov. 19, 1982) reported on the failure of inspected enterprises to comply with the mandates of the 1980 EPDA. Poles could even view environmental information on their television sets. In May 1984, for example, Polish television reported on a *Sejm* commission's assessment of the 1980 EPDA. The report noted that the *Sejm* commission found 'an alarming reduction in the quantity of pure surface waters throughout the country,' and a 60 percent increase in air pollution emissions. The broadcast further noted that two-thirds of Polish forests were located in areas of 'permanent or temporary threat' (*BBC Monitoring Service: Eastern Europe*, May 31, 1984). A June 1986 Polish television report on beach closings along the Baltic

Sea coast near Gdańsk disclosed that enterprises in the province were discharging 270,000 tons of mostly untreated sewage into the Baltic Sea each day (*BBC Summary of World Broadcasts*, June 19, 1986).

Besides the popular press, specialized environmental publications began to appear in the 1970s and 1980s. The journal *Aura* regularly published accounts of environmental problems and policies (see, e.g., Apr. 1978 on sewage treatment; Sept. 1978 on water pollution; Nov. 1978 on environmental inspections; Nov. 1979 on air pollution; and Feb. 1981 on lax environmental protection). In 1981, the officially recognized Nature Protection League published a special edition of its journal *Przyroda Polska* (Polish Nature) on the threats to public health posed by Poland's environmental problems. The report included 'the best information existing in Poland on the extent of the ecological threat to the country and its people' (see Kabala 1993a, 53).

Even when the Party/state publicized or allowed publication of environmental information, that information remained the property of the Party/state; unauthorized republication was prohibited. This policy sometimes led to absurd situations in which the Party/government denied the existence of environmental problems that already had been publicized through official (i.e., Party-approved) channels. On August 1, 1985, the Party's daily newspaper, *Trybuna Ludu*, reported that 35 percent of Poland's population lived in exceptionally bad environmental conditions which would require at least 25 years to improve. Because the report appeared in *Trybuna Ludu*, it obviously had the blessing of Party authorities, and its appearance provoked no official rebuke. The situation was very different later that year, however, when the *Życie Warszawy* daily (*BBC Monitoring Service: Eastern Europe*, Sept. 12, 1985) reported on a study conducted by the Polish Chemical Society, under auspices of the Polish Academy of Sciences' Committee on Chemical Sciences. The article summarized the study's findings, including its conclusion that 'Poland leads Europe in atmospheric pollution.' At a press conference the next day, the Party/government's infamous press spokesman, Jerzy Urban, denounced not only *Życie Warszawy's* article, but the Polish Chemical Society's study, which he called 'alarmist and exaggerated.' Urban claimed, contrary to the study, that Poland was not an environmental disaster area; other countries, including (by implication) many in Western Europe and North America, suffered from more severe environmental problems than Poland. He also noted the Polish government's great efforts and achievements on behalf of the environment (*Foreign Broadcast Information Service—Eastern Europe*, Sept. 11, 1985). In response to the official rebuke, *Życie Warszawy* published a follow-up editorial in which it defended its earlier report and, with biting sarcasm, expressed the nation's gratitude for the government press spokesman's keen interest in environmental issues (see Rensenbrink 1988, 168). A similar episode took place a year later, when Radio Free Europe (RFE) reported on the '[a]pocalypse' of Poland's natural environment. Once again the government's press spokesman denounced the report, calling it a collection of 'lies, lies and only lies.' But this time Urban

reserved most of his venom for an *ad hominem* attack on the RFE reporter, a former government economic planner named Stefan Bratkowski:

The alleged remedial measures aired by the RFE commentator are the same rubbish as his diagnoses, while the entire hysterical argument designed to scare people uses environmental protection as a pretext alone to express a political view that under the existing rule in Poland our people will die with no one to come to the rescue because these stupid and inefficient authorities deliberately aim at society's destruction.

Free Europe proclaims apocalypse hoping for collective unrest if it manages to succeed in giving Poles a good scare and arousing each listener's anxiety. Former economy rationalizer Bratkowski perished for this kind of service, getting poisoned with political venoms of his milieu, while there was born a hysterical demagogue seeking idiots among listeners. (*Foreign Broadcast Information Service—Eastern Europe*, Nov. 10, 1986)

It is not difficult to understand why the Polish Party/state was sensitive about the publication of environmental information; aside from the fact that censorship comes naturally to totalitarian regimes, Poland's increasingly severe ecological crisis belied the supposed environmental superiority of socialism, thus undermining what was, by the 1980s, one of the few remaining sources of Party/state legitimacy. More difficult to understand is the Party/state's apparent inconsistency in controlling environmental information, especially during the 1980s. There seemed little rhyme or reason about what information the Party censored or authorized for dissemination. Perhaps Party leaders felt that they needed publicly to address environmental problems that were becoming increasingly obvious as they grew more severe. There certainly was increasing political pressure to provide information about environmental problems. When the Solidarity movement emerged in 1980, one of its first demands was that the Polish government release classified environmental data (see Ziegler 1987, 150). And throughout the 1980s, Party/state efforts to keep environmental information secret grew increasingly irrelevant as the Polish Ecology Club (PKE) and other non-governmental environmental organizations conducted their own investigations and publicized the results in Poland's irrepressible underground press. These unofficial studies tended to be methodologically and analytically superior to official Party/government environmental studies. And to many Poles they were inherently more credible than official Party/government studies, which were presumed to be biased to minimize the extent of Poland's environmental problems.

The Party/state's inconsistent censorship of environmental information may also have reflected the battle for the 'soul of the Party' waged during the 1980s. We have already seen some reflections of that battle. For example, the establishment of the High Administrative Court in 1980, and the subsequent establishment of a Constitutional Tribunal in 1985, constituted victories for intra-Party reformers, who felt

that the Party could maintain its 'leading role' in society only by loosening (to some extent) its stranglehold on political, legal and economic power. Finally, we should not overlook the fact, illustrated in Chapter 2, that the Party (or some influential group within the Party) was genuinely concerned about environmental protection. The Party's lack of consistency on environmental information may have reflected the ongoing conflict between that concern and the Party's totalitarian compulsions.

4.6. Summary and Conclusion

This chapter has addressed a variety of distinct but closely interrelated 'political' impediments to environmental law enforcement in People's Poland. Factors including the ruling Party's overriding commitments to full employment and maximal economic production, the lack of judicial independence and competence, the relative weakness of environmental protection agencies in the Party/state's administrative hierarchy, and the incompetence of environmental law enforcement agents all contributed substantially to the underenforcement of Poland's environmental laws. From a normative point of view, a crucial question is whether these were unavoidable problems for environmental protection in a 'Rule of Party' state. I will reserve that question for Chapter 8, which deals extensively with the normative implications of the failure of environmental protection in People's Poland. Already it seems clear, however, that many, if not all, of the 'political' problems that hindered environmental law enforcement could have been ameliorated only at substantial cost to Party authority. For example, the Party/state might have strengthened the position of environmental protection officials within the administrative hierarchy, but only by compromising its commitments to full employment and maximal economic production, which would have eroded the legitimacy of its rule. Ultimately, behind all the 'political' problems of environmental law enforcement lurked a single insurmountable obstacle: the Party's commitment to self-preservation.

Notes

1. As Jerzy Jendroška (1993a, 351) has put it, 'environmental problems were not caused by the absence of environmental laws, but first of all by the fact that these laws were not enforced.' For similar assessments of other former Soviet bloc countries, see, for example, Goldman (1972a, 26), Ziegler (1987, 81), French (1990, 34), Pryde (1991, 90–1), and Kramer (1983, 217).

2. Kamiński and Sołtan (1989, 381) refer to a 'soft-law constraint' under socialism, as an analogue to the soft budget constraint that is endemic to socialist economies.

3. In Chapter 8 (§8.5), I address theoretical issues concerning the relationship between totalitarianism and environmental protection.

4. There is disagreement in the academic literature about what constitutes a 'totalitarian' regime. As I use the term, it is not intended to denote a literal attainment of 'total'

power, signifying the complete annihilation, suppression or co-optation of actual and potential opposition. The concept of ‘total’ power is like infinity: it can never be reached. So there can be no such thing as a *perfectly* totalitarian society. Even Jozef Stalin, who may have come closest to fulfilling the totalitarian ideal, was only ‘almost perfect’ (Kołakowski 1977, 284). In the real world, ‘totalitarian’ regimes are denoted by the *goal* of total rule, combined with some substantial (but otherwise ill-defined) level of inchoate success, signified by the effective repression or co-optation of actual or potential political, social and economic opposition. This definition has the virtue of allowing for *degrees of totalitarianism*, so that the USSR and People’s Poland can both be described as ‘totalitarian,’ though the extent of repression in the former was far greater than in the latter.

5. Article 7 of Poland’s 1952 Constitution (1976 Dz.U. No. 7, item 36, as amended) provided that ‘[t]he Polish People’s Republic realizes and develops a socialist democracy.’

6. Central economic planning, and its impact on environmental protection in People’s Poland, is discussed in detail in Chapter 5 (§5.1)

7. The *nomenklatura* system constituted ‘a major pillar, if not the foundation itself, of the party centre’s executive authority and the key to its rule over the party as a whole and the whole framework of non-party institutions—and thus to its domination over Polish society’ (Kolankiewicz and Lewis 1988, 82).

8. In a similar vein, the fact that ‘legitimacy principles,’ such as the commitment to full employment, hindered economic reform efforts does not mean that the Party did not really care about improving economic efficiency (see S. Gomułka 1986, 295).

9. On the relationship between land-use planning and socioeconomic planning in People’s Poland, see Kulesza (1987, esp. chap. 6).

10. I have more to say about the Okęcie airport case in Chapters 7 (§7.4) and 8 (§8.6).

11. Under article 50 of the 1952 Constitution, judges were supposed to be directly elected, but the Party/government disregarded that constitutional provision after determining that the socialist system in Poland was not yet sufficiently ‘mature’ to permit popular election of judges (see Piękałkiewicz 1970, 370–1). The offending provision was subsequently removed from the Constitution when it was amended in 1976.

12. The relationship between the Party and the courts in the former Czechoslovakia evidently was much the same. According to Otto Ulč (1972, 61), a former Czechoslovak judge: ‘[i]n about ninety percent of the court agenda, there was not the slightest sign of interference in our decision-making. This observation, however, does not warrant the conclusion that some sort of “ninety percent judicial independence and integrity” existed. Both the sorry experience with the remaining ten percent and the awareness that someone might at any time inflict his “suggestion” upon us, conditioned *all* our adjudication.’

13. It should be noted, however, that the courts never disputed the right of the Minister of Environmental Protection to waive or reduce environmental fines. For example, in a 1983 case, the High Administrative Court upheld a fine for water pollution, but noted the authority of the government to provide exemptions for technical, economic or social policy reasons (see Radecki 1991a, 16–17).

14. The nature of production and pricing under socialism is discussed more extensively in Chapter 5 (§§5.3 and 5.4).

15. The poor quality of pollution-monitoring equipment in Poland remained a problem to the end of the Communist era (see Nowicki 1992, 211). I have more to say about such technical problems of environmental protection in the next chapter (§5.4).

Chapter 5

ENFORCEMENT PROBLEMS II: SOCIALIST ECONOMICS

This chapter continues the explanation of environmental law *enforcement* problems in People's Poland, focusing on economic issues. The analysis is in five sections, beginning in §5.1 with a structural introduction to the socialist economic system; §5.2 relates the underenforcement of environmental law in Poland to stagnation in the socialist economic system; §5.3 describes the extensive nature of economic production under socialism which led to many of Poland's environmental problems; §5.4 explains how the socialist economic system's pricing mechanism, which ignored resource scarcity, prevented a switch to more intensive modes of production; and §5.5 explains how the socialist property rights system created a conflict of interest for the Party/government, which was responsible for enforcing environmental regulations against the very enterprises it owned and controlled. That regulatory conflict of interest led the government to soften budget constraints on enterprises, reducing the effectiveness of environmental fees and fines.

5.1. An Introduction to Poland's Socialist Economic System

Orthodox Marxist–Leninist theory posits that the economic ‘base’ of a society dictates the sociopolitical ‘superstructure’ (including, of course, law). But, as critics of Marxism–Leninism (and some neo-Marxists) have pointed out, the influence is actually reciprocal: politics and ideology greatly influence the structure and operation of the economy (see, e.g., Kelsen 1955, 26–7). Despite the obvious interrelation, it is common, and perhaps necessary as an organizational matter, to separate out economic analysis from political and ideological analysis.

The economic structures of socialism were premised on three ‘architectural principles’ of Marxism–Leninism: socialist property relations (meaning, primarily, social ownership of the means of production), central economic planning and ‘technological determinism.’ These principles were constants of Poland's socialist economic system. None of the numerous efforts to reform Poland's economy before December 1988 (with the notable exception of the abandonment of forced

collectivization in 1956) sought to abolish central planning or privatize the means of production.

Socialist Property

In *The Communist Manifesto* of 1848, Marx and Engels (1978, 484) wrote that ‘the theory of the Communists may be summed up in the single sentence: Abolition of private property.’ In Marx’s view, capitalist socioeconomic relations, based on private property and the anarchy of the market, alienated people from each other and from nature. The purpose of the socialist system was to harmonize those relations, in the first place by abolishing private property in natural resources and the means of production. This has proven to be among the least contentious aspects of Marxist socialism among Marx’s contemporaries and later Marxists.¹ Consequently, certain fundamental theoretical questions about the nature and use of socialist property never have been adequately addressed. For example, neither Marx nor his most influential followers addressed the basic dilemma that arises with the onset of socialism: ‘who controls the great economic power materialized in public property and social capital’ (Rusinow 1977, 139).² In the absence of a theoretical treatment of that critical question, the Party/state asserted control by default (see Gouldner 1980, 382).

When the Communists seized power in Poland just before the end of World War II, they quickly and systematically expropriated land and the means of production. Even before declaring itself the Provisional Government of the Polish Republic (*Rząd Tymczasowy Rzeczypospolitej Polskiej*), the Soviet-sponsored Polish Committee for National Liberation (*Polska Komitet Wyzwolenia Narodowego*) began the process of nationalizing land and the means of production. And, it is interesting to note, it did so through legislation (see, e.g., 1944 Dz.U. No. 4, item 17), indicating that Communist rule in Poland would be legislastic, if not legal. The Constitution enacted in 1952 expressly recognized the ‘socialized means of production’ as an important component ‘in the transformation of social and economic relations’ (1952 Dz.U. No. 33, item 232). The Constitution permitted limited private ownership of land, means of production and personal property (narrowly defined) (arts. 12 and 13). But the extent of private ownership rights was decidedly limited. The Party/state could seize private property without compensation ‘in cases established by law’ (art. 74, sec. 3), that is, in accordance with Poland’s 1964 Civil Code (1964 Dz.U. No. 16, item 93). The Civil Code established a hierarchy of property categories distinguished by varying levels of protection from Party/state interference. At the top of the property ladder, state property (‘all national property’) and cooperative property received the greatest legal protection from expropriation and interference—greater than privately owned farms, for example. This was nonsense, of course, since ‘all national property’ was owned and controlled by the Party/state in the first place. At the bottom

of the ladder, ‘individual property of a *capitalist* character (i.e., involving the use of hired labor or the ownership of urban land and buildings)’ received virtually no legal protection. The Party/state could expropriate it at any time and for any purpose without raising a legal or constitutional issue (Rudziński 1973, 80). By the mid-1980s, privately owned land received somewhat greater *legal* protection against expropriation (see Kordasiewicz and Wierzbowski 1995), but it is doubtful whether this translated in greater *actual* security. Aleksander Rudziński’s (1973, 85) description of Poland’s socialist property regime remained fairly accurate:

Far from being a natural human right preceding the rule of law and recognized and regulated by it, ownership no longer represents an area of freedom of action; it becomes an authorization granted to the owner to consume the object (personal property), or even a *duty* imposed on him to use the object according to the plan (state property).

People’s Poland did not abolish private property per se, just most private property *rights*. From the perspective of the Marxist–Leninists who founded People’s Poland, this was not just a necessary condition for socialism; on a structural level, Party/state control of property was a precondition to implementing other socialist ‘architectural principles,’ such as central planning. Social ownership of the means of production was, as Oskar Lange (1963, 17) put it, ‘the organizational principle’ for productive and distributional relations. Most importantly, from a Leninist perspective, Party/state control of the means of production served to maximize the Party’s power over individuals and social groups. By owning almost all capital assets in the country—more than 85 percent of the means of production in the late 1970s and early 1980s—the Party/state became Poland’s primary employer, ‘controlling who would be employed and promoted.’ Through its control of the economy, the Party/state became ‘the locus of decision making’ (Kamiński 1991, 22).

Central Economic Planning

As owner of the means of production, the Party/state was able to direct Poland’s economic development. It sought to do this, in accordance with the writings of Marx, Engels and Lenin, through scientific central planning. The theory was that, under conditions of social ownership (and state control) of the means of production, central planning was not only a feasible alternative to the market but a more efficient choice. State planners were supposed to provide better-informed economic decision making than the anarchic marketplace in which millions of independent agents made individualized decisions, admittedly with less than perfect information about social costs and benefits. Those information constraints led to market inefficiencies that, by definition, should never exist in a planned econ-

omy. Furthermore, producers in the capitalist system could only *predict* demand; they had to continually adjust production in order to accommodate unanticipated changes in the rate of demand. Such *post hoc* corrections rendered the market system highly inefficient relative to a theoretical socialist economy within which supply and demand would be preplanned. As Engels wrote in the *Anti-Dühring* (1975c, 266), ‘with the taking over by society of the means of productive forces, the social character of the means of production and of the products will be utilized by the producers with perfect understanding.’ Instead of the economy controlling societal relations, socialist society would control the economy (see Engels 1975c, 279).³

The backbone of socialism’s claim to greater rationality and efficiency was its supposed capacity for ‘full employment of human and material resources’ (Brus and Laski 1989, 6). As Joseph Schumpeter (1976, 194) noted, the planned economy at least in theory should remain ‘determinate’ in cases where capitalist markets fail, so that resource allocation and production can be maintained at ‘optimal’ levels at all times. In addition, socialism purports to put all economic resources to work for the full development of the whole society, whereas, under capitalism, many resources may sit idle as a small group of capitalists accumulates great profits. In this respect, according to Marxist and neo-Marxist dogma, socialist central planning not only is more efficient than capitalism but also rests on a higher moral plane.

A detailed assessment of socialism’s claim to greater economic efficiency and morality is beyond the scope of this project (for the last word, see Kornai 1992a). But it is clear that the reality never lived up to the promise. Socialist economies did not prove to be more efficient than their capitalist competitors. On the contrary, they were less efficient, and their chronic and ever-increasing inefficiencies ultimately led to the downfall of communism in Europe. Nor did socialism prove to be morally superior to capitalism. True, it put more resources to work; but, as we shall see later in this chapter, it *wasted* far more productive resources (per unit of production) than did its capitalist competitors. The socialist system created ‘a vast separation’ between the state and the people, and brought about ‘not only a material but a drastic spiritual impoverishment of the population’ (Clark and Wildevsky 1990, 4). Most importantly for present purposes, socialism brought about an environmental crisis that, according to Jan Marcinkiewicz (1987, 42), ‘biologically threatened’ the very existence of the Polish nation.

In People’s Poland, as in all the Soviet bloc countries, the Party/state controlled the vast majority of economic activities through Leninist central planning. Long- and short-term plans allocated investment resources and specified production targets. By design, the entire Party/state apparatus was tied in to the planning process. The economy was pyramidal in structure, just like the government and Party (conforming to the Leninist concept of *democratic centralism*, discussed in Chapter 4). Socioeconomic plans were imposed from the top down, but they were premised on information sent up from the bottom. Individual economic

actors (enterprises) and the administrative units that managed them (associations and ministries) reported to central planners on production levels and investment needs, and that information was used to design new plans or refine current plans to ensure optimal resource allocation and maximal production. Planners implemented the plans by issuing 'directives' to administrative units and enterprises. The number of planning directives was subject to change; in different periods, enterprises had to comply with more or fewer planning criteria. However, central planning and resources allocation at all times remained pervasive features of the socialist economic system.

At the top of Poland's economic pyramid were the Politburo of the PZPR and the Council of State which, through their plenary authority over the entire state apparatus, in effect governed the planning process. Primary *legal* authority for designing and implementing economic plans was located in the Council of Ministers' Planning Commission, which had the incredibly difficult, if not impossible, task of collecting and digesting information coming up from the various sectors of Poland's complex and highly interdependent socialized economy. As the late Alec Nove (1986, 132) explained it, the planning process 'requires multimillion instructions as to what to produce, to whom deliveries should be made, from whom inputs should be received, and when. All this must be made to cohere with plans for labor, wages, profits, investment financing, material-utilization norms, quality, productivity for each of many thousands of productive units.'

Before the computer age it was inconceivable, even to staunch proponents of socialism, that planners could successfully perform the 'multimillion' calculations required for accurate planning. But by the 1960s, many, including the great theoretician of central planning, Oskar Lange (1969, 158), expressed confidence that computer technology would not only make accurate planning feasible but render the market process obsolete 'as a computing device of the pre-electronic age.' Even in the age of computers, however, the ability to effectively plan a large and diversified economy is doubtful. Time is a crucial variable in planning, and it is not at all clear that the multimillion bits of economic information could be collected, fed into the computer and calculated within the useful life of the results. An analogy to weather forecasting may be instructive. Today's computers are capable of predicting tomorrow's weather for a specified location with uncanny accuracy. However, weather forecasters are forced to sacrifice a certain degree of accuracy for the sake of utility. It would take more than 24 hours to input and compute all the information needed for maximally accurate forecasts, but those forecasts obviously would be obsolete by the time they became available. The same problem must also plague efforts to plan an economy centrally (see Arnold 1990, 259).⁴ Even if plans could be completely accurate, they never would be entirely 'scientific' because they depend on economic *policies*, which inevitably implicate non-scientific value judgments. For example, as Lange (1938, 85) acknowledged, the selection of an economic investment rate is inevitably arbitrary and political (see also Feiwel 1971b, 20; 1971a, 333), though it is a critical variable in plan

calculations. So planning can never be just a ‘technical’ process. And to the extent planning decisions unavoidably are political, the institution of central planning is inherently anti-democratic because planners impose their own production and consumption preferences on the whole of society (see Hayek 1944, esp. chap. 5).

Planning is also impeded by technological developments in products and processes. With all of the world’s computers at their disposal, planners could never foretell technological developments that might alter optimal investment, cost and production levels over a given plan period (Bernholz 1987, 166). In fast-changing economic circumstances, where markets are quick to adapt, central plans are sluggish and unwieldy. Any change in one part of the plan requires changes to many others because production activities are highly interdependent.

These problems notwithstanding, Poland’s Planning Commission was supposed to set output levels for all sectors of the economy for each plan period (one-year, three-year or five-year) based on information received from enterprises, associations and industrial ministries, and pursuant to policy directions issuing from the PZPR’s Politburo, the Council of State and the Council of Ministers. As with the rate of investment, the planned level of output was as much a political as an economic decision. The consistent policy (throughout the Soviet bloc) of investing more in heavy industrial than in consumer-oriented production was a function of ideology and entrenched political interests rather than of economic ‘science.’

Planners allocated inputs and assigned output targets using what has been called the ‘Method of Material Balances’ (see Rutland 1985, 114–17). Unlike capitalist markets in which prices determine resource allocation and production, socialism’s Method of Material Balances assigns *physical* units of inputs and outputs without regard for *value*. Economists have long recognized the drawbacks of this method. To borrow a well-worn example, the output of a nail factory typically was based on gross weight of output. On this measure, it did not matter whether the factory produced millions of tiny nails or one gigantic nail, so long as the total weight was the same. More importantly, as we shall see shortly, planning by physical units rather than economic value impeded efforts to conserve resource inputs. The lack of a (non-arbitrary) pricing mechanism rendered the socialist economic system irrational-in-fact because planners found no alternative method of accounting for resource scarcity (see Arnold 1990, 249–50).

After the Planning Commission established output targets, its next task was to allocate investments among the various sectors, based on the total available supply of resources and planned production. This was also the phase of the planning process when central planners allocated funds for ancillary (‘non-productive’) activities, including environmental protection. Once resource allocation decisions were made, the draft plan was submitted to the Council of Ministers for its approval, and, finally, to the *Sejm* for its rubber-stamp.⁵

After the socioeconomic plan was completed and approved, the Planning Commission was responsible for its implementation and any necessary adjustments during the plan period. As it happened, adjustments were continually nec-

essary. Indeed, the frequency and intensity of ‘mid-course corrections’ suggest that Poland’s economy was not ‘planned’ in any meaningful sense. For this reason, some commentators insist on referring to socialist economies as ‘administered,’ rather than ‘planned’ (see, e.g., Zaleski 1984, 484; Wilhelm 1985, 118–19).

Initial responsibility for plan implementation fell to the various economic ministries, under the direct supervision of the Council of Ministers. Each economic ministry represented a different sector of production. In 1980, for example, there were 14 branch economic ministries: Mining; Metallurgy; Electric and Atomic Energy; Chemical Industry; Domestic Commerce and Services; Light Industry; Machine-Building; Food Industry and Agricultural Purchases; Agriculture; Forestry and Timber; Construction and Building Materials; Administration, Local Economy and Environmental Protection; Foreign Trade and Maritime Economy; and Heavy and Agricultural Machinery. Other ministries, including the Finance Ministry, the Ministry of Labor, Wages and Social Affairs, and the Material Economy Ministry, also had substantial responsibilities related to plan implementation, though they did not represent specific economic sectors. The number and structure of ministries changed frequently beginning in the 1960s, as the Party/state attempted (or feigned) various economic and administrative reforms. But the structure of economic decision making always remained highly centralized. The number of planning directives might grow or shrink, but the center always remained firmly in control.

The branch ministries with initial responsibility for implementing socio-economic plans were, in some cases, directly responsible for individual enterprises within their sectors of the economy. After receiving plan targets and investment allocations from the Planning Commission of the Council of Ministers, they would assign specific production targets and allocate resources to each individual enterprise within their jurisdiction. More often, an intermediate level of management, called an ‘association,’ stood between the enterprise and its ministry. An association was a legally recognized grouping of enterprises within a given industry. This simply added another layer of bureaucracy in the planning process. The branch minister would allocate resources and production targets to the associations which, in turn, would allocate resource and production targets among their member enterprises. At that point, achieving the planned level of output became the paramount concern of individual enterprises. This did not mark the end of the planning process, however. As already noted, plans never survived the plan period intact, but were subject to almost continual revisions and modifications. Often, the plan did not achieve its final form until the plan period was over.

Technological Determinism and Socialist Economic Development

The institution of central planning did not dictate any particular development strategy. As already noted, decisions to allocate more resources to one sector of the

economy rather than another was not a technical question for planners but a political and ideological question for the Party. Another principle of Marxism–Leninism known as ‘technological determinism’ drove an economic development strategy based on heavy industrial production that prevailed throughout the Soviet bloc.

Technological determinism was an outgrowth of Marx’s preoccupation with economic development as a primary determinant of societal relations. In the *Critique of Political Economy*, Marx (1971, 21) wrote that ‘[n]o social order ever perishes before all the productive forces for which there is room in it have developed, and new, higher relations of production never appear before the material conditions of their existence have matured in the womb of the old society itself.’ On this theory, the level of productivity determines the prevailing system of socioeconomic relations. Thus, feudalism gave way to capitalism only as its capacity for further development waned. And, according to Marx, capitalism paves the way for socialism by increasing productive forces to levels where scarcity is no longer an insurmountable problem. When the economy grows to the point at which it can provide enough for everyone, regardless of population size, the inequitable distribution of wealth under capitalism can no longer be justified objectively. Meanwhile, according to Marx, as new technology reduces the amount of necessary labor in production, unemployment increases. The rate of profit declines because machines, unlike the workers they replace, cannot be exploited for surplus value. Firms unable to keep pace with the technological changes become uncompetitive and are forced from the market, leading to higher rates of unemployment and the further monopolization of capital (see Clark and Wildavsky 1994, 56). This fuels class struggle over control of the means of production, and the working class ultimately prevails. Thus, the high productivity of advanced capitalism leads to socialism, which, in turn, creates the necessary preconditions for even higher levels of production under stateless, conflict-free communism.⁶

Although Marx’s Russian interpreters necessarily rejected his view that only advanced capitalism provides the necessary preconditions for socialism,⁷ they wholeheartedly agreed with the importance he attached to economic development. In their interpretation, the single most important factor in the course of human history—explaining human progress from feudalism, through capitalism, to communism—is the development of productive forces. They condensed Marx’s entire materialist theory of history into ‘technological determinism,’ according to which the level of scientific and technological development delimits economic development, which, in turn, determines socioeconomic relations. Technological development becomes ‘the primary causal agent of social and political development’ (Ziegler 1987, 8). Although this interpretation of Marx has been disputed, it is a logical extension of some of Marx’s own writings. For example, in *Capital* (1967, vol. I, 386), Marx argued that technology was a prerequisite to production: ‘Just as a man requires lungs to breathe with, so he requires something that is work of man’s hand, in order to consume physical forces productively. A water-wheel is necessary to exploit the force of water, and a steam-engine to exploit the elasticity

of steam.’ And in *The Poverty of Philosophy* (1936, 92), Marx wrote that ‘[t]he hand-mill gives you society with the feudal lord; the steam-mill, society with the industrial capitalist.’ Marx apparently believed, as Alan Ryan (1987, 119) has put it, that ‘the course of history is the course of increasingly effective technology.’ And he ‘expected socialism *to create* (and not simply to utilize) the conditions of abundance, by fully opening the sources of development of the productive forces, *first of all by spurring technical progress*’ (Brus 1974, 167; emphasis added). Marx presumed (or predicted) that socialism would create more favorable conditions for further technological progress, and this warranted his assertion that socialism would prove to be a more efficient (as well as a more equitable) system than capitalism (see S. Gomulka 1986, 182). Marx’s influential Russian interpreters believed that technological determinism was both a precondition to and a consequence of economic development. Technical advances enabled economic development, which, in turn, led to progressive structural changes in the economy. At each successive stage of historical development, technological advances multiplied in number and magnitude—just as the rate of innovation under capitalism was unimaginable under feudalism, so, they argued, the rate of innovation under socialism would eclipse capitalist advances.

Later in this chapter, we will see how experience contradicted the claimed technological superiority of socialism. For now, the important point is that the principle of technological determinism played a central role in the development of socioeconomic policy throughout the history of the ‘People’s Democracies,’ including People’s Poland. In all the countries constructed on the Soviet model, rapid industrialization, along with high rates of innovation and economic growth, were political and ideological priorities. From Lenin to at least Brezhnev and Gierek, socialist leaders displayed a myopic determination to overtake the capitalist economies of the West. To accomplish this, the Soviets instituted, first in their own country and later throughout the bloc, an intensive industrialization strategy that ‘relied on merciless exploitation (some would say shortsighted plundering) of the countries’ natural resources of land, water and minerals, on processing these resources in a rather wasteful way to produce poor quality products using methods of production that appear to have been significantly more capital- and labour-intensive than need be’ (Brus 1974, 183). This extensive growth strategy was unsustainable; it rapidly depleted available supplies of both labor and natural resources. Economists in Poland and throughout the Soviet bloc recognized this problem by the mid-1960s, when they began calling for fundamental reforms in production patterns to conserve resources and improve dynamic efficiency. In response, the Party/states attempted on several occasions (if only half-heartedly) to institute reforms. From the 1960s onwards, Poland’s economy constantly ebbed and flowed between reforms and retrenchment. But the investment bias favoring resource-intensive and environmentally stressful heavy industrial production remained throughout ‘a distinct characteristic of communist development strategy’ (Brus 1974, 168).

The 'Long History of Short Reforms' in People's Poland

The history of People's Poland was defined by crises: economic, political and ecological. The Communist Party changed leaders four times in its history, each time in the wake of public protests and riots. First, in 1956, following riots in Poznań, Władysław Gomułka came to power, replacing the Stalinist regime. In 1970, following riots in the Baltic seaports, Gomułka was replaced by Eduard Gierek. The crisis that precipitated the rise of Solidarity in 1980 was so severe that it prompted successive leadership changes: Gierek's immediate replacement, Stanisław Kania, ruled for only a few short months before being removed in favor of General Wojciech Jaruzelski, who promptly overcame Solidarity's immediate political challenge by declaring Martial Law. Brute force could not, however, surmount Poland's structural economic crisis, which finally caused the system to collapse at the end of the 1980s.

Crises defined the economic, as well as the political, history of People's Poland. Indeed, each political crisis was largely economic in origin. When workers protested in Poznań in 1956, they demanded an increased standard of living as well as an end to Soviet domination. The banners they carried proclaimed 'BREAD AND FREEDOM' (Davies 1982, 584). The 1970 and 1980 protests that brought down Gomułka and Gierek, respectively, were direct responses to government price increases that eroded Poland's already meager standard of living. Each crisis produced a new Party/state leader promising economic reforms to correct the 'mistakes' of the past and deliver prosperity. The chronology of major economic reform packages closely tracked the leadership changes: 1956–8, 1973 and 1982 (see Jermankowicz 1988, 84–6).

The very fact that Poland's leaders felt the need to make structural adjustments every five to ten years suggested that something was seriously amiss with the supposedly more rational and scientific socialist economic system. The various reform efforts all shared the goals of increasing economic efficiency, reducing waste and raising the standard of living. Complete failure was another common trait. None of the reforms had any kind of long-term positive effect on Poland's economic performance. Indeed, it is a misnomer even to refer to them as 'reforms,' if we define that term with Włodzimierz Brus (1988, 65) to require 'a meaningful change in the operating *principles* of an economic system,' as opposed to just any old modification in the existing framework.

All efforts to reform Poland's socialist economy failed for essentially the same reasons: they treated symptoms rather than the diseased system itself; they were piecemeal, when comprehensive changes were in order; they were blocked by the self-interested bureaucracy; and they were actually or in effect rescinded by the Party even before they could be implemented. Consider the remarkably consistent assessments of major and minor reform efforts from the 1950s through the 1980s by a varied group of distinguished economists:

John Michael Montias (1962, 304) on the 1956–8 reforms:

The record for the years 1957–59 reveals that the reforms were gradually eroded by the central bureaucracy; this trend was merely accelerated by the economic crisis of the summer of 1959 which impelled the government to retract some of the concessions granted in the preceding years.

Włodzimierz Brus and Kazimierz Laski (1989, 62) on the 1968 ‘minor’ reforms:

The failure of most of the reform attempts was explained by the political resistance of the ruling elites; by the vested interests of the party and state bureaucracies, coupled with a reluctance on the part of the rank-and-file and the managers to trade security for stronger incentives linked to efficiency; and finally by substantive difficulties in devising and implementing a sufficiently consistent and workable reform project.

P. T. Wanless (1980, 50–2) on the 1973 reforms:

These reforms have proved no more successful than earlier attempts. Even before the economic difficulties of 1975–76, the reforms can be criticized on various counts: the piecemeal introduction of the reforms; the lack of reforms in central planning; and the continued supervisory role of the economic ministries. . . . [A] combination of economic stress and political weakness at the time the reforms were introduced led to the reforms emerging in partial form, lacking certain essential elements.

Leszek Balcerowicz (1989, 48) on the 1982 reforms:

[I]t is clear that the system which evolved during the period 1982–1987 did not achieve the basic objectives stated in the reform proposal: a considerable increase in economic efficiency and the elimination of chronic shortages. The basic reason for this failure is to be seen in the fact that the reform has not been sufficiently comprehensive and radical. There have been many partial changes. . . . But the problem is that the basic features responsible for the poor performance of the traditionally planned economy with respect to efficiency and market balance have remained, although sometimes in a weakened, modified or disguised form.⁸

Jan Winiecki (1991, 23) on the 1987 ‘second-stage’ reforms:

By 1987 the failure of the latest round became glaringly visible even to the ruling group. Consequently, the propaganda apparatus started a campaign for the

'second stage' of economic reforms and the bureaucracy prepared a blueprint of expected changes. However, the blueprint had all the marks of a counter-reformation move. It was quite radical in its verbal encouragement for entrepreneurship, innovation, and enterprise autonomy, the role of prices in the economy, etc., but the fundamentally unchanged property rights structure and the proposed policy instruments leaving wide possibilities for both systematic and *ad hoc* interventions, made the 'second stage' very much like the first.

The reforms all failed to improve efficiency, reduce waste or raise the standard of living for most Poles. That is not to say they had no effects at all. Efforts to introduce market mechanisms in a marketless economic system managed to combine the worst features of the capitalist and socialist systems: inflation and shortages (see Kamiński 1991, 73). Rather than improving the economy's performance, these reforms tended to exacerbate existing problems. Most importantly, none of the reforms (excepting the abandonment of forced collectivization in 1956 and the dismantling of central economic planning at the beginning of 1989) substantially altered the political-economic system. The 1982 reform, for example, reduced for a short time the degree of central control over economic activities, but enterprises remained dependent on the center for investment funds and subsidies (see Kornai 1992a, 466; Eysymontt 1989, 34). When self-management reforms introduced a measure of democratic self-government within enterprises, single-party rule continued on the outside, and the Party/state, as owner of the means of production, retained ultimate decision-making power concerning the 'self-managed' enterprises (Kornai 1992a, 464).

Simply stated, the reforms did not succeed because the system was unreformable (see Eysymontt 1989, 30; Prybyła 1988, 359). And the system could not be reformed because of entrenched interests within the PZPR and the state's administrative hierarchy who were unwilling to give up political control and its perquisites for the sake of improved economic efficiency (see Brus 1988, 76; Feiwel 1971a, 345). As János Kornai (1992a, 525–7) has pointed out, real economic reform aimed at increasing efficiency would have required a radical shift from administratively controlled to market-set prices. But such a shift was never seriously attempted (at least not before 1988), partly because of lingering ideological commitments but mostly because any substantial reductions in administrative control would have meant a loss of property rights (in other words, rents) and political power among the ruling elite (see Winiecki 1991, 16). As with its commitment to environmental protection, the Party was interested in improving economic performance only to the extent that its control over the economy was not threatened. Any proposed reforms that substantially reduced central Party control constituted a direct threat to Party authority, so were rejected as contrary to the advancement of socialism. In other words, the Party was in favor of reforming everything but itself. Its consistent attitude toward economic reform, first enunciated by Władysław Gomułka in the 1960s, was based on a contradiction: the

‘process of decentralization must be accompanied by the consolidation of central control, especially of financial control’ (quoted in Montias 1962, 319).

Throughout the remainder of this chapter, Poland’s various economic reforms will be neglected, except insofar as they had direct significance for environmental protection. For the most part, the socialist economic system will be presented as an unchanging edifice from the time of its imposition during the Stalinist period to its eradication at the end of 1988. This portrayal may not be completely accurate, but it surely comes closer to reality than ‘the long history of short reform’ in People’s Poland (Holland 1988, 135).

5.2. Economic Stagnation and the Underenforcement of Environmental Law in People’s Poland

The Decline and Fall of Poland’s Socialist Economy

After strong post-war growth during the late 1940s and 1950s, Poland’s economy began to stagnate in the 1960s. In 1970, the new Party/state leader Eduard Gierek attempted to revive the economy with a reform program that promised to increase investment and consumption at the same time. Fully aware that the Party/state did not possess the stake money to pull off that feat, Gierek looked beyond Poland’s borders for financial assistance, and he found willing partners in the West. At the beginning of the 1970s, Western commercial banks were flush; they had more money than they knew what to do with, so they decided to loan some to countries, including Poland, in the misguided belief that sovereign debtors could not go bankrupt. Poland began to borrow heavily from Western governments and commercial banks, receiving US\$6 billion in Western credits between 1970 and 1975. By the end of the 1980s, Poland was the world’s fourth-largest debtor country, owing more than US\$40 billion to Western governments and commercial banks. The significance of this debt for the subsequent history of People’s Poland can hardly be overemphasized; it would not be too much of an exaggeration to say that the loan officers at Citibank had as much to do with the downfall of communism in Poland as Ronald Reagan and Margaret Thatcher did.

During the first half of the 1970s, Gierek’s scheme produced what was called an ‘economic miracle’ in Poland. The capital he borrowed contributed to substantial increases in production, economic growth rates and the standard of living. But debt-financing growth proved to be a disastrous gamble. In 1973–4, the OPEC oil embargo quadrupled the price of world oil, shocking the world economy into recession. In the West, trade deficits and interest rates skyrocketed. As interest rates rose, the pool of cheap credits dried up. Meanwhile, Poland’s hard currency export earnings dwindled, as its relatively expensive and low-quality exports found fewer and fewer buyers in the shrinking world markets. By the end of the decade, the Party/state could not meet its foreign debt repayment schedules, and

Table 5.1. Average and annual rates of GNP growth in People's Poland, 1965–88 (%)

1965–70	3.0
1971–75	5.7
1976	4.1
1977	2.8
1978	3.7
1979	–1.9
1980	–2.6
1981	–5.3
1982	–0.6
1983	4.6
1984	3.4
1985	1.1
1986	2.8
1987	–2.4
1988	1.6

Sources: For 1965–75—Alton (1981, 391, table 19); for 1976–87—Fallenbuchl (1989, 103, table 1); for 1988—US Central Intelligence Agency (1990, table C.15).

its domestic economy was approaching collapse. All this at a time when Poland's environmental problems were reaching crisis proportions.

Poland's socialist economy never really recovered before it was abandoned at the end of 1988. The economy staggered through the 1980s with economic growth averaging less than 1 percent annually. Table 5.1 provides real average and annual economic growth rates for Poland from 1965 to the end of 1988 (when socialist central planning was largely abandoned).

Poland's Economic Decline and the Rate of Investment in Environmental Protection

Environmental law enforcement depends in the first instance on financial outlays. This truism explains almost completely how Poland's economic travails obstructed environmental protection efforts. The most direct impact was on the rate of investment in environmental protection, which was hardly lavish to begin with. Even in times of relative prosperity, central planners allocated only a small percentage of national income for air pollution scrubbers, sewage treatment facilities, pollution-monitoring equipment, and other environmental protection needs. For example, in 1971–5, when Poland's economy was growing rapidly, environmental investments averaged only 0.35 percent of gross national product (GNP) and only 1.1 percent of total investment outlays.

Table 5.2. Rates of economic growth, environmental investments and sulphur dioxide air pollution emissions in People's Poland, 1976–88

	<i>Economic growth rate</i>	<i>Environmental investment as % of GNP</i>	<i>Environmental investment as % of total investment</i>	<i>Sulphur dioxide emissions (% growth)</i>
1976	4.1	0.40	1.2	10.8
1977	2.8	0.45	1.4	1.2
1978	3.7	0.38	1.3	7.9
1979	–1.9	0.35	1.2	NA
1980	–2.6	0.28	1.0	7.6 ^a
1981	–5.3	0.20	1.2	1.0
1982	–0.6	0.25	1.4	1.0
1983	4.6	0.40	2.2	0.9
1984	3.4	0.50	2.5	0.9
1985	1.1	0.54	2.8	0.9
1986	2.8	0.74	2.8	–2.4
1987	–2.4	0.80	3.5	0.0
1988	1.6	0.80	3.5	0.0

a. Two-year percentage increase.

Sources: Economic growth rates—Table 5.1; environmental investment as % of GNP—Ministry of Environmental Protection, Natural Resources and Forestry (1992b, 62, fig. 19); environmental investment as % of total investment—*Ochrona Środowiska* 1976–90; Ginsbert-Gebert (1991b, 46, table 6); sulfur dioxide emissions growth rates—1976–8, *Wiadomości Statystyczne*, No. 11, Dec. 1979, pp. 7–12, table 1; 1980, *Ochrony Środowiska* 1989 xxv, table I; 1981–8, Institut Ochrony Środowiska (1991, table 22).

When the economy stagnated, environmental projects were always among the first budget items to be slashed. Socioeconomic planners considered them expendable luxuries, and most Polish citizens agreed that in tough times the country could not afford expensive environmental protection (see *Życie Warszawy*, Nov. 24, 1982, at p. 3). In accordance with this perception, the rate of investment in environmental protection closely tracked economic growth rates. This relationship is clearly reflected by the data in Table 5.2. Up to about 1987, the rate of investment in environmental protection rose or fell along with the rate of economic growth. But then the pattern suddenly changed. When the economy began to decline again in 1987, the rate of environmental investment continued to increase as a percentage of gross national product. This change may have been precipitated by economic studies from the mid-1980s showing that spending on environmental projects was not an expendable luxury but a critical necessity.

In the 1980s, Antoni Symonowicz (1988) evaluated economic losses attributable to environmental pollution and resource waste, including all reasonably ascertainable losses to public health, architecture, industrial equipment, agricultural produce and forests from pollution damage, as well as economic losses due to the inefficient use of natural resources. According to his studies, economic losses in 1980 resulting from waste and pollution amounted to approximately 206 billion zlotys. In 1983, according to a different study (Górka and Poskrobko 1987, 89), pollution and resource waste cost between 500 and 600 billion zlotys, or 7–9 percent of national income. A 1985 study by economists from the Kraków Academy of Economics (discussed in Familiec et al. 1991, 49–50) estimated nationwide ecological losses at 2,216 billion zlotys, more than 25 percent of national income. The economic costs were even higher in the more heavily polluted regions of the country. In Kraków, for instance, ecological damage for 1985 was estimated at 34–35 percent of net production. The Kraków economists rightly concluded that the volume of economic costs from ecological damage constituted ‘a final argument for active environmental protection’ (Familiec et al. 1991, 50).

Apparently Poland’s central planners were paying attention because in the late 1980s the rate of environmental investment increased despite declining production and income levels. It is important to note, however, that the actual rates of increase in environmental spending never came close to *planned* levels. Between 1976 and 1980, ‘a bare 40 percent’ of planned outlays for environmental protection were actually expended (*Życie Warszawy*, Nov. 25, 1982). In 1987, actual environmental investments were 9 percent lower than stipulated in the annual socioeconomic plan; and in 1988, environmental expenditures fell 17 percent short of planned levels (Rusiński 1991, 37). These investment shortfalls exacerbated law enforcement problems, reducing, for example, the Party/state’s ability to monitor pollution activities. The State Environmental Protection Inspectorate’s monitoring program provided only about 5 percent of national environmental data; for the other 95 percent, the Polish government had to rely on notoriously unreliable enterprise self-monitoring. By way of comparison, state monitoring produces more than 50 percent of environmental information in Norway and the Netherlands (Rusiński 1991, 32). Funding shortfalls in People’s Poland also hampered basic environmental research. For example, between 1975 and 1985 Polish researchers conducted regular epidemiological studies of the health impacts of pollution on children living near the Katowice Foundry. (As we learned in Chapter 1, children throughout Katowice and Silesia suffer inordinately high rates of infant mortality, respiratory illnesses, lead poisoning, leukemia, birth defects and mental illness.) However, these studies were discontinued between 1986 and 1990 solely for lack of funds (Jonderko 1990, 7).

The Party/state’s efforts to increase environmental expenditures in a stagnant or shrinking economy were laudable, but vain. Poland simply could not invest

Table 5.3. Average percentage of gross national product invested in environmental protection in Poland and other selected countries, 1971–85

	1971–75	1976–80	1981–85
Bulgaria	1.0	1.1	1.1
France	1.1	1.5	1.6
Great Britain	1.1	1.5	1.7
Hungary	1.0	1.1	1.1
Japan	1.4	1.5	1.6
Poland	0.35	0.37	0.43
Romania	1.1	1.0	1.0
Soviet Union	1.3	1.2	1.2
Sweden	1.5	2.0	1.9
United States	1.4	1.8	1.8
West Germany	1.8	1.8	1.9

Source: Ginsbert-Gebert (1991b, 46, table 7).

enough in environmental protection to begin offsetting the economic harm caused by accumulating environmental degradation. It was like a dog chasing its tail, investing 0.5 percent of national income to fight a crisis costing between 10 and 20 percent of national income. The rate of investment in environmental protection simply could not keep pace with the rate of environmental destruction caused in the (increasingly futile) pursuit of economic growth. Table 5.3 compares Poland's rate of investment in environmental protection as a percentage of gross national product with investment rates in several other Communist and capitalist countries. Even compared with its socialist allies, Poland's level of investment in environmental protection appears meager. In fact, Poland did not reach the 1 percent investment level until 1991, two years after the fall of communism.⁹

5.3. The Extensive Nature of Economic Production under Socialism¹⁰

Poland's intertwined economic and ecological crises were neither fortuitous nor primarily the results of exogenous factors, such as fluctuating world markets. They were rooted in the socialist economic system. This section focuses on the extensive nature of economic production under socialism.

The Symbiotic Relation between Environmental Protection and Economic Growth

The relationship between economic growth and environmental protection is complex and controversial. Environmentalists traditionally have blamed environmental problems on economic development, while industrialists (as well as third world politicians) often criticize environmental regulation as an overly expensive and often unnecessary impediment to growth and development. But, increasingly, economic development and environmental protection are viewed as interdependent, rather than mutually exclusive, goals. Concepts such as ‘sustainable development’ (see World Commission on Environment and Development 1987) and the ‘polluter pays principle’ (see Opschoor and Vos 1991) exemplify efforts to create development policies that combine economic growth with environmental protection. They implicitly entail the notion that long-term environmental protection is not possible without economic growth and vice versa.

It is easy to see that environmental protection requires economic growth. Environmental programs are, after all, *very* expensive. In the United States alone, environmental protection costs approximately US\$115 billion annually (US Environmental Protection Agency 1991, v–vii). Without funds to finance the investigation of environmental problems and the design, implementation, and enforcement of regulatory measures, a developing country has only two options: become severely polluted or prohibit all polluting activities. In reality, only the first option exists; the second is illusory because a country that lacks funds for environmental protection never could afford to enforce a ban on polluting activities (assuming agreement could be reached on what constitutes a ‘polluting activity’ in the first place).

Environmental degradation plagues countries at all levels of economic development, but is often most acute in poorer, less developed countries. Even completely unindustrialized countries often suffer from chronic environmental problems, such as poor sanitation, shortages of potable water, and deforestation (see Radetzki 1990, 8). The need for environmental protection thus precedes industrialization. But that need increases dramatically as economic development and industrialization proceed. In most countries, industrialization begins with transportation infrastructure and heavy industry (such as steel production). This type of development creates a high level of environmental stress. And the greater the level of environmental stress, the more important economic growth becomes for environmental protection. If the industrializing country’s economy manages to produce sustained growth along with the higher levels of environmental stress, then the government can afford to take effective steps to protect the environment. However, if the economy fails to produce *real* growth along with the pollution, then a serious problem arises—high levels of pollution and very little money with which to combat it. This, in a nutshell, was the situation of People’s Poland and the other countries of the former Soviet bloc.

The symbiotic relationship between economic growth and environmental protection is supported by studies correlating growth in per capita income and environmental investment. As income rises, so does the propensity to allocate resources for environmental purposes (see Walter and Ugelow 1979; US Agency for International Development 1979; United Nations Center on Transnational Corporations 1985; Shafik and Bandaopadhyay 1992). As Marian Radetzki (1990) explains, rising per capita income spurs consumerism, which (at least in demand-driven markets) causes a shift in production from environmentally stressful heavy industries to less stressful service industries to meet consumer preferences. In addition to their material desires, consumers (as voters) state preferences for quality of life, resulting in increased direct investment in environmental protection. Over time, the amount of environmental stress created per unit of production tends to decline because of a naturally occurring (at least in capitalist economies) shift from extensive to intensive patterns of production.

In early stages of economic development, supplies of resources, including labor and natural resources, are plentiful. They have relatively low economic value, so they can be exploited with scant regard for waste. Economic growth will be produced by maximizing investments of these cheap 'inputs.' This type of growth is *extensive*. As economic development continues, available resources, including both labor and natural resources, become increasingly scarce. Consequently, they become more expensive to use. As prices for inputs rise, producers will naturally tend to intensify production patterns (at least in the absence of cheap and suitable substitute inputs). Instead of maximizing sheer numbers of inputs, they will seek to maximize the productive output from each input, thereby improving dynamic efficiency. In other words, they tend to practice conservation. One consequence of this shift to more *intensive* modes of production is that less stress is placed on the natural environment per unit of national income produced (Radetzki 1990, 14).

Empirical studies confirm that economies *tend* to shift from extensive to (increasingly) intensive patterns of production (see, e.g., Malenbaum 1978). This shift is represented in Figure 5.1. The inverted U-shaped curve indicates that at early preindustrial stages of development, environmental costs are relatively low (though perhaps not insignificant). They grow quickly as countries enter a middle stage of development dominated by heavy industrial activities, such as steel production and construction of transportation infrastructure (highways and rail-lines). If efficient, this production leads to high rates of per capita income growth, which, in turn, leads to a shift in demand away from heavy industrial production to the environmentally less stressful production of consumer goods and services. In a recent study of the relationship between per capita income and four pollution indicators—urban air quality, oxygen demand in rivers, fecal contamination of rivers, and heavy metal contamination of rivers—economists Gene Grossman and Alan Krueger (1995, 369) reached the following conclusion:

Figure 5.1. Environmental stress at different levels of economic development.

Source: Based on Radetzki (1990, fig. 13A).

[W]e find little evidence that environmental quality deteriorates with economic growth. Rather, we find for most indicators that economic growth brings an initial phase of deterioration followed by a subsequent phase of improvement. We suspect that the eventual improvement reflects, in part, an increased demand for (and supply of) environmental protection at higher levels of national income. The turning points for the different pollutants vary, but in most cases they occur before a country reaches a per capita income of \$8000. For seven of the fourteen indicators we find a statistically significant positive relationship between environmental quality and income for a middle-income country with a per capita GDP of \$10,000. Only in one case (fecal coliform) do we find a significant adverse relationship at this income level.

Grossman and Krueger (1995, 371) are quick to point out, however, that ‘there is no reason to believe that the process has been an automatic one.’ This is important to bear in mind as we turn our attention to the non-conforming relation between economic growth and environmental protection in the formerly socialist economies of Central and Eastern Europe.

Western studies of growth patterns were not lost on Party leaders in the former Soviet bloc. In People’s Poland, economic growth was designated an official strategy for environmental protection. The Party/state cited Western studies linking economic growth to environmental protection in support of its disingenuous claim that Poland ultimately would outgrow its environmental problems simply

by revving up its economy to Western levels and beyond (conversation with Dr. Tomasz Żylicz, Special Advisor to the Polish Ministry of Environmental Protection, Natural Resources and Forestry, July 10, 1993). Of course, that never happened, despite the fact that between 1950 and 1979 Poland's economy grew (according to official statistics based on the dubious model of material balances) at an average annual rate of 4.12 percent, almost 0.75 percent higher than the average rate of growth in the United States during the same period (Pryor 1985, 76). But the effect of that growth on Poland's natural environment was anything but beneficial. As Poland's economy grew, factor productivity and the condition of the natural environment both deteriorated. There are at least three plausible economic explanations for this.

First, despite comparable growth and environmental investment rates, the younger and smaller socialist economies could not buy as much environmental protection as the generally larger and more mature capitalist economies. Their *percentage* investment may have been the same, but their *nominal* investment was much smaller. In other words, they were taking proportional slices from smaller pies. This is borne out by statistics comparing nominal gross national product in the former Soviet bloc countries with the capitalist West (see Alton 1981, table 11).

Second, high rates of 'hidden' inflation directly devalued environmental investment increases in the socialist economies, and indirectly impeded the use of environmental expenditures by reducing (through shortage) supplies of materials available for use in environmental protection (see Peterson 1993, 170).

Third, structural features of the socialist economy prevented what is, under capitalism, a naturally occurring shift from extensive to intensive modes of production. And the failure to make that shift, perhaps more than any other feature of the Communist political economy, was responsible for the massive and chronic environmental degradation experienced throughout the former Soviet bloc.

The third reason is by far the most important. But a few comments are in order about the first, which focuses on the size and maturity of the economy. It is true that the socialist economies were nominally smaller than the advanced capitalist economies, and they were less developed technologically. But that is not because they were younger or less developed, as posited in Rostovian 'stages of growth' theories (see Rostow 1990). By the 1970s, the socialist economies were among the most highly industrialized in the world. Poland ranked as the world's tenth industrial power in total output (Sądowski 1976, 49). To what extent, then, were Poland's lower national income figures legitimately attributable to its later economic development, rather than to systemic and ideological factors that, among other things, impeded the shift from extensive to intensive production patterns? I do not propose an answer to that question. I raise it only to cast doubt on the claim that the poor environmental performance of socialist economies was strongly related to their stage of development. That claim is worth doubting for three reasons. First, factor productivity throughout the Soviet bloc was quite low

even as compared with countries at similar levels of development (Brus and Laski 1989, 29). More generally, empirical studies suggest that the nature or structure of the economic system, far more than the level of economic development, determines environmental performance (see, e.g., Bernstam 1991). Finally, the claim that environmental performance is determined by the stage of economic development implies that economic growth may be a *sufficient*, as well as necessary, condition for environmental protection. That implication could be used to support disingenuous claims that the socialist economies eventually would have outgrown their environmental problems in time. In fact, the experiences of the socialist economies—Poland's in particular—belie the contention that economic growth and increased environmental investments are *sufficient* conditions for effective environmental protection.

The Extensive Pattern of Production under Socialism

Whereas the explanation based on the stage of economic development is problematic and controversial, the explanation based on the nature of economic growth is neither. Socialist economic development exemplified the extensive pattern of production and its environmental consequences. The former Soviet bloc countries displayed a persistent and myopic determination to catch and then surpass the capitalist West's level of economic development (see, e.g., Spulber 1964, 35). And the constant strategy for achieving this goal was to pump massive inputs of capital, labor and natural resources into large-scale heavy industrial development (see, e.g., Ofer 1988, 55). Meanwhile, the socialists paid scant attention to factors such as resource scarcity and productive efficiency, initially for ideological reasons (stemming from Marx's labor theory of value—see Chapter 6, §6.4) and later because of entrenched political and economic interests (see Kramer 1973, 373).

Politically and economically dominated by the USSR, and with only limited access to Western capital and technologies, the socialist countries of Central and Eastern Europe had little choice but to follow the Soviet Union's extensive strategy of economic growth. Decade after decade they invested ever higher numbers of inputs to achieve roughly the same economic growth levels as their West European competitors. Table 5.4 illustrates the relative extensivity of production in the former Soviet bloc compared with the European Community. Through the 1980s, the socialist countries had to invest more than three times the energy and almost twice the water to produce the same amount of income as capitalist European countries.

The relative extensivity of production in the Eastern European countries remained constant to the end of the socialist experiment. Unlike the capitalist economies, the socialist economies grew increasingly wasteful, that is, less intensive, as time passed; less production, rather than more, was obtained from each input. Table 5.5 illustrates this by comparing relative productivity per input, over

Table 5.4. Natural resources invested per unit of national product in socialist Europe and the European Community in the 1980s

	<i>Socialist countries^a</i>	<i>EC countries</i>
Energy intensity of GDP, TOE/\$1,000 ^b	0.77	0.23
Water intensity of GDP, m ³ /\$1,000	153	82

a. Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania.

b. TOE = metric ton of oil equivalent.

Source: Żylicz (1993b, table 1).

Table 5.5. Share of factor productivity in the growth of output: international comparison

Average annual rate of change				
Country	Period	Output	[Factor] productivity	Share of factor productivity in growth of output
Socialist countries				
Czechoslovakia	1960–75	3.0	1.0	0.33
	1976–80	2.2	0.7	0.29
	1981–88	1.4	0.1	0.07
Poland	1960–75	5.1	2.4	0.47
	1976–80	0.7	–0.6	–
	1981–88	0.8	0.2	0.40
Soviet Union	1960–75	4.6	1.2	0.26
	1976–80	2.3	0.5	0.22
	1981–88	1.9	0.5	0.13
Capitalist countries				
France	1960–73	5.8	3.9	0.67
	1973–79	2.8	1.7	0.65
	1979–88	1.9	1.5	0.75
Japan	1960–73	10.8	6.6	0.61
	1973–79	3.6	1.8	0.43
	1979–88	4.1	1.8	0.43
United Kingdom	1960–73	2.9	2.2	0.76
	1973–79	1.5	0.5	0.60
	1979–88	2.2	1.96	0.95

Source: Kornai (1992a, 187, table 9.6).

a three-decade period, for selected socialist and capitalist countries. The statistics show that factor productivity—production per unit of input—steadily contributed to economic growth in France, Japan and the United Kingdom, whereas in the socialist European countries factor productivity played a relatively small and declining role in economic growth. Further evidence is provided by Polish statistics relating net output to material costs. Between 1960 and 1978, consumption of raw materials in Poland increased by 3.1 percent; and the rate of increase rose to 5.2 percent between 1978 and 1981 (Marek and Kassenberg 1990, 45).

The increasingly extensive production patterns of the socialist economies had predictable consequences for the natural environment. The scale of waste in the Soviet Union and its satellite countries was unparalleled. For example, the Soviet mining industry typically extracted only the most accessible mineral deposits, and processed only the ores with the highest mineral content; the rest was dumped in slag heaps (Kramer 1973, 371). Table 5.6 shows the inordinately high percentage of mineral resources lost in the extractive process in the Soviet Union. Similarly, in People's Poland, about 60 percent of recoverable coal was wasted. By way of comparison, in other countries with similar geological circumstances only about 30 percent of recoverable coal is lost in the extractive process (S. Gomułka 1986, 184). Overall, the material intensity of production in the socialist European economies was 55 percent higher than in capitalist countries (Staniszki 1992, 91–2).

Excessive pollution was another by-product of the extensive pattern of production. Obviously if one country has to burn more coal than another to achieve the same level of income production, it will produce more air pollution to achieve the same level of income production (assuming coal with similar properties, equivalent abatement technologies, etc.). Table 5.7 presents comparative statistics on the pollution intensity of GDP—the amount of pollution produced per unit of national income produced—for the formerly socialist countries of Central and Eastern Europe and the European Community countries. The socialist countries produced 2.5 times the solid waste, discharged more than three times the wastewater, and emitted more than twice the gas and 13 times the dust of European Community countries to produce the same amount of national income.

Given that economic growth in the socialist European countries was purchased at comparatively great expense to the natural environment, it should not be surprising to find that environmental protection in those countries was comparatively unsuccessful, even though their rates of economic growth were quite high. And while the extensive pattern of production took its toll on the environment, environmental degradation took its toll on the economy, costing between 10 and 20 percent of national income. The economies of all the Soviet bloc countries stagnated in the 1970s and 1980s as inputs, including natural resources, grew increasingly scarce (see, e.g., Herer and Sądowski 1990, 126). The question becomes why the socialist Party/states did not (or could not) cultivate more intensive modes of production. Earlier I suggested that the shift from extensive to intensive production patterns was naturally occurring, but it did not naturally

Table 5.6. Percentage losses of natural resources in the extraction process in the USSR

<i>Natural resource</i>	<i>% loss</i>
Coal	30
Potassium salts and oil	50–60
Non-ferrous metals	20
Mica	90

Source: Kramer (1973, 371, table 3).

Table 5.7. The pollution intensity of GDP in socialist European countries and the EC in the 1980s

	<i>Socialist Europe^a</i>	<i>The EC</i>
Solid waste, metric ton/\$	1.0	0.4
Wastewater, cubic metres/\$1,000	83	24
Gases, kg/\$1,000	51	24
Dust, kg/\$1,000	13	1

a. Bulgaria, Czechoslovakia, East Germany, Hungary, Poland and Romania.

Source: Żylicz (1993b, table 1).

occur in People's Poland or the other countries of the Soviet bloc for a variety of systemic reasons.

5.4. Systemic Impediments to Resource Conservation

In the 1960s, economists in Poland and throughout the Soviet bloc began calling for reforms to improve economic efficiency and conserve investment resources in the socialist economic system (see Becker 1986, 23; Fallenbuchl 1973, 235). Their motivation was economic, rather than ecological. In the Soviet Union, for example, billions of tons of wasted resources were costing the national economy up to 6 billion rubles each year (Peterson 1993, 129). Numerous reforms designed to increase factor productivity were implemented, but they were uniformly ineffectual. Various system-specific features of the socialist economy obstructed them. In this section, I will review two of the most important impediments to increased conservation of natural resources (including clean air and water) under socialism: first, the socialist pricing mechanism, under the influence of Marx's labor theory

of value, failed to account adequately for increasing (relative) resource scarcity; second, the socialist reward (wage and bonus) system did not provide adequate incentives for technological innovation, resulting in a 10–20-year environmental technology gap between the Soviet bloc and the capitalist West.

The Socialist Pricing Mechanism and Resource Scarcity

In addition to determining resources allocation patterns and output levels, the centralized socialist administration controlled prices for producer and consumer goods. Prices were set to achieve a wide array of goals, ranging from the ideological—meeting Marx’s ‘average price of production’ standard—to the politically pragmatic—quieting popular discontent. Unfortunately (from the point of view of economic efficiency), prices only rarely (and then coincidentally) were set at market-clearing levels. Most importantly, central planners paid virtually no attention to relative scarcity when setting prices. Their chronic and often intentional undervaluation of inputs, especially natural resources, was substantially responsible for the steady decline in factor productivity.

In the socialist economic system, natural resources were provided to producers virtually free of charge (Peterson 1993, 16). As Robert W. Campbell (1991, 117) has expressed it, environmental goods had ‘zero prices.’ This was, on one level, just another subsidy, softening the budget constraint for state-owned enterprises. But it was more than a mere subsidy. The policy of providing natural resource inputs free of charge had strong ideological roots in Marxist theory, specifically in the labor theory of value (discussed in detail in Chapter 6, §6.4), which became a cornerstone of the socialist economic system, governing the economics of natural resource use until the very end. So when Soviet economists began calling for resource-use fees, they were opposed by conservative forces, including lawyers, who argued that natural resources, as socialist property, could not be bought and sold as commodities (see Goldman 1972a, 40). And the conservative forces prevailed. Into the 1980s, the official view in the Soviet Union was that free use of land was ‘one of the greatest achievements of the October Revolution’ (DeBardeleben 1985, 244). This sentiment was reflected in Soviet economic policy, codified in legislation (see 1968 Vedomosti SSSR, Issue No. 51, Item No. 485 and 1970 Vedomosti SSSR, Issue No. 50, Item No. 564), and exemplified in Soviet industrial practice. For instance, when planners developed a hydroelectric project that would flood valuable agricultural lands, the cost of lost agricultural production from those lands was ignored (see Campbell 1991, 54). Similarly, when whole forests were felled, tons of rotting wood lay wasted because there were not enough trains to carry them to market; but this technically did not constitute a cost to the Soviet economy (Komarov [pseud.] 1980, 70). Extraction costs were incurred, of course, but the value of the wood itself was not considered. The consequence of neglecting the scarcity value of timber was predictable: in the

Soviet Union during the 1980s, 40 percent of wood was wasted in the production process, amounting to 100 million cubic meters each year (Peterson 1993, 130).

Pollution, likewise, was defined as cost free to society because it did not result in the production of goods from human labor. To borrow Peter Magg's (1985, 359) vivid example:

the steel produced in a steel mill would be valued as the sum of the values of the coal and iron ore used as inputs plus the labor cost of the steelworkers. The coal and iron would be valued at the cost of their extraction. Yet, no value or cost would be attached to the destruction of farmland or scenery by open pit mining, to the exhaustion of the country's best energy and mineral reserves, or to the pollution of the air, water and land by the steel mill, since none of these resulted in the production of goods incorporating human labor.

Adherence to Marx's labor theory of value was not absolute and uniform throughout the Soviet bloc, however. In the 1930s, the influential socialist economic theorist Oskar Lange (1937, 138; 1935, 189) condemned the theory as obsolete and insufficient because it failed to account for the scarcity of resources other than human labor. East Germany, usually among the more doctrinaire of the Marxist-Leninist regimes, was the first to impose nominal resource-use fees in the late 1960s (see DeBardeleben 1985, 242). As we learned in Chapter 2, Poland enacted its first resource-use fees in the 1974 Water Law. Poland's 1980 Environmental Protection and Development Act then created the most extensive system of resource-use and pollution fees in the world. This constituted tacit repudiation of Marx's labor theory of value and implicit recognition that, although natural resources might be provided free of charge, they could not be provided free of *cost*.

Pollution and resource-use fees were poor substitutes for scarcity pricing but, of course, they were never intended as substitutes. As Joan DeBardeleben (1985, 246) has noted, resource-use fees were never based on supply (i.e., relative scarcity), demand and the marginal costs of development. For example, in People's Poland the price of coal never even approached the marginal costs of production. The predictable consequence was excessive coal burning (see Kabala 1990, 62). The Polish Party/government occasionally raised the price of coal, but price increases were always combined with offsetting subsidies to users (see, e.g., Montias 1962, 289). This practice undercut any incentive users otherwise might have had to increase factor productivity.

Technological Innovation and the Socialist Reward System

In his pioneering studies of economic growth, Nobel laureate Simon Kuznets investigated the shift countries make from extensive to intensive modes of pro-

duction as their economies mature. The high rates of economic growth produced during middle levels of development, when heavy industrial production is dominant, lead to high rates of growth in what Kuznets (1971, 322–3) called ‘the stock of useful knowledge.’ This includes knowledge of pure and applied sciences—the kind of knowledge that spurs technological innovation. Innovation, in turn, results in increased factor productivity and shifts in production patterns, permitting economic growth to continue even as supplies of available inputs, including natural resources, decline over time. Kuznets’s theory developed from his studies of economic growth and structure, over long historical periods, in a variety of countries. He reached the ‘inescapable conclusion’ that high rates of growth in per capita product during ‘modern economic growth’ are attributable primarily to increased factor productivity, rather than increases in inputs (specifically man-hours and capital accumulation) (Kuznets 1966, 80–1). The tremendous increase in factor productivity needed to generate substantial rates of economic growth is provided by ‘the high and accelerated rate of technological change’—‘the hundreds of minor inventions and thousands of improvements which by their cumulative impact drastically reduce relative cost’ (Kuznets 1971, 307, 326).

As Gur Ofer (1988, 22) has pointed out, the former Soviet bloc countries never conformed to Kuznets’s definition of modern economic growth. Kuznets (1971, 329) himself recognized the socialist economies as anomalies under his theory, and he explained them away by noting that growth in ‘useful knowledge’ and technological innovation are not automatic consequences of economic development in every political-economic context; an important prerequisite is ‘a social and ideological framework within which science can prosper.’ The lack of a conducive atmosphere for science in the former Soviet bloc explained for Kuznets why economic growth there was driven not by increasing factor productivity but by the continuous ‘forced draft of resources’ (Kuznets 1966, 84n35). A number of other scholars (e.g., Ammon and Cooper 1986, 1982; S. Gomulka 1986; Hanson and Pavitt 1987; Poznański 1987) have analyzed the political-economy of science and technological development in the former Soviet Bloc. Their findings confirm that the socialist economies were unable to generate the kinds of scientific and technical innovations needed for the shift to more intensive and, therefore, less environmentally stressful patterns of production. Indeed, they contradict the suppositions of Marxist writers that socialism would provide *more*, rather than less, conducive conditions for innovation (accord Stanisław Gomulka 1986, 54–5). They socialist economies lagged behind the West at each stage of the innovation process, from research to application to diffusion (Smith 1981b, 242). According to Soviet economists, technology development activities in their country took, on average, 50–100 percent longer than in the United States. Where Japan required only 3.6 years to put new technology into commercial use, it took the Soviets 6.4 years (Linz 1992, 66). The time-lag was even greater for environmental technologies. For example, Soviet pollution-control technologies for the chemicals industry were ‘at least twenty years behind world standards’; while American air

pollution scrubbers were removing 85 percent of sulphur from emissions, the best Soviet technology could remove only 10 percent (Peterson 1993, 39).

In the entire Soviet bloc, according to Włodzimierz Brus and Kazimierz Laski (1989, 32), there was ‘not a single case of leapfrogging into frontier technologies like electronics, plastics, man-made fibres, or new pharmaceuticals; the usual picture is that of following with a time lag’ (see also Kornai 1992a, 298–300, table 12.6). The numbers bear out their observation. In the late 1970s, the OECD¹¹ countries produced three times more domestic patent applications and 33 times more foreign patent applications than the CMEA¹² countries (S. Gomułka 1986, 177–8).

The technology gap between East and West persisted despite the socialist ‘fetish’ for technological development. As noted earlier, the socialist economic system was founded on the Russian Marxist concept of technological determinism, according to which technology delimits economic development which, in turn, determines socioeconomic relations. Technological innovation, on this theory, is an important precondition for the march from capitalism, through socialism, to communism. To that end, research and development (R&D) investments in the former Soviet bloc countries were always substantial. In the 1970s and 1980s, R&D expenditures in the Soviet Union ranged between 4 and 5 percent of national income (Linz 1992, 65). This generated considerable technological progress, but typically *not* the kind that contributes to economic growth, for instance by reducing production costs. Like the rest of the Soviet economy, the science economy was characterized by high rates of investment and low rates of productivity (Kornai 1992a, 183). Fully 86 percent of all Soviet innovations resulting from R&D investments yielded no economic return at all (Linz 1992, 66). The Soviets accomplished tremendous technological feats in military and space applications, but they had difficulty producing the ‘hundreds of minor inventions and thousands of minor improvements’ to increase economic efficiency.¹³ Soviet factories increasingly resembled museums of technological history. In the 1980s, for example, steel mills in Poland and the former Soviet Union still used grossly inefficient and highly polluting open hearth furnaces built in the nineteenth century (see Peterson 1993, 13).

The reasons for the slow pace of growth-oriented technological innovation in socialist economies were largely systemic. The socialist property system created a disincentive to innovate because all innovations became socialist property, and the innovator’s compensation was rarely worth the effort (see Linz 1992, 74–5). Central planners exacerbated this problem by rewarding enterprise managers and workers only for fulfillment of plan production targets, with little regard for efficiency.

Socialist enterprises, like capitalist firms, made investment and production decisions—including decisions to invest in cost-saving innovations—with an eye toward the bottom line. But the bottom line was very different under socialism. It had nothing to do with the firm’s ability to sell what it produced at a profit; it had

everything to do with the firm's achievement of plan production targets and its political clout with the central administration. As far as socialist enterprises were concerned, the bottom line was *the bonus*. Managers and workers received substantial bonuses—potentially amounting to more than half their annual incomes—for fulfilling physical plan production targets. The bonus was not, however, a profit substitute. Unlike the profit motive, the bonus motive created little incentive to innovate, except to reduce supply shortages and speed production. Innovations that might have reduced costs and conserved resources were irrelevant to the bonus. Planners rewarded production, period; the efficiency or inefficiency of production was generally irrelevant. According to Józef Wilczyński (1972, 234), the central planning system emphasized 'the quantitative fulfilment and overfulfilment of targets, and the system of incentives was such that cost reduction and improvement in quality were largely ignored.'¹⁴ In fact, the reward structure created *disincentives* to design and implement cost-saving innovations. Any technical or process change that delayed or impeded the achievement of production targets jeopardized the bonus. In other words, efficiency improvements could not help, but could harm enterprises. Under the circumstances, managers quite rationally refused to implement innovations that would have reduced production costs, conserved resources and improved product quality (see Campbell 1991, 44–5).

Enterprise managers also manipulated information in the planning process to avoid environmental protection duties. Central planners allocated resources to enterprises on the basis of the predicted costs of achieving plan targets, which included environmental protection goals as well as output levels. These cost predictions primarily were based on information provided by the enterprises, and managers rationally distorted information in order to maximize their allocations and minimize their targets. By overestimating environmental costs, they created a win-win situation: if they received all they asked for, it would constitute a wind-fall profit after making required environmental investments; if not, they would have a legitimate excuse for not making environmental investments and for failing to comply with any emissions limits specified in their operating permits.¹⁵

The production-based socialist reward system also disabled the most important contributor to cost-saving innovations under capitalism: the buyer. In the capitalist economy, the market itself creates the chief incentives for innovation. Buyers purchase new products that fill their needs better than old ones; they select for quality; and they buy from the producers with the lowest prices, given the same level of product quality. Manufacturers in competitive markets innovate to create new products, to improve the quality of existing products and to lower production costs. These types of innovations increase competitiveness, leading to increased market share and higher profits. The socialist economy was, by contrast, a sellers' market in which goods were produced and priced according to directions from above rather than demand from below. Buyers without access to alternative sources of goods (excluding the sizeable black market) or substitutes had no influence on product quality or price. If they simply refused to purchase

a product because of low quality or high price, the producer typically was unaffected. An enterprise that met production targets was fully compensated even if no one bought what it produced, that is, regardless of profit (see, e.g., Clark and Wildavsky 1990, 245).¹⁶ Consequently, there was no upward pressure to innovate, as there is in capitalist economies.

The Party/state subsidized prices as well as costs. As a result, prices for available goods often did not accurately reflect production (let alone social) costs. As a result, buyers did not receive the kinds of price signals necessary to make rational market decisions. It is unlikely, therefore, that buyers could have impelled innovation even if they had been empowered to choose among competing products.

5.5. Socialist Property Relations, Regulatory Conflicts of Interest and Soft Budget Constraints

The socialist property rights system (previously discussed in §5.1) vested in the Party/government nominal ownership of virtually all the means of production in Poland (excluding agriculture, which was left predominantly in private hands after the abandonment of forced collectivization in 1956¹⁷). This created an insurmountable conflict of interest with respect to environmental regulation: the Party/government was supposed to regulate (for environmental protection) the same enterprises it owned and controlled. The predictable result was that environmental regulations were chronically underenforced.

The Party/State's Regulatory Conflict of Interest

As owner, the Party/state financed, allocated resources to, set production parameters for, and determined wages and bonuses of managers and workers in all state enterprises. As regulator, the Party/state was supposed to enforce environmental rules against those very same enterprises. The implications of this conflict of interest may appear obvious to us, but according to orthodox Marxist–Leninist theory there should have been no conflict. The unification of social forces under the common control of the workers—represented exclusively by their (self-appointed) Party—supposedly constituted a profound improvement over the fractious management of competing social forces under capitalism; environmental restrictions should have been much easier to impose on state-owned enterprises because industrial managers and environmental regulators were both agents of the same principal, the Party/government. As a Romanian government official once put it, ‘our Socialist system . . . enables us to resolve pollution problems without conflict. . . . The state represents the people’s interest in reducing pollution from industrial plants, and since the state owns the factories, the people are assured that adequate pollution measures are always taken’ (quoted in Leonard 1988, 210).

Existing studies strongly suggest, on the contrary, that a little adversity between the regulat-*or* and the regulat-*ed* can be a very good thing. In the 1980s, the French jurist Laurent Cohen-Tanugi studied government regulations in France and the United States and found that regulations tend to be more successful where the regulator does not participate directly in the economic risks generated by its regulations, that is, where the state has no direct financial stake or ownership interest in the regulated firms (Cohen-Tanugi 1985, 140–4; also see Jancar 1987, 310–11). The separation of regulatory authority from ownership of the means of production results in more effective environmental regulation. In the absence of this separation, governments typically are unable to divorce their regulatory functions from their ownership interests. This conflict of interest tends to influence the content and enforcement of economic regulations, including environmental regulations. The result is less effective environmental protection.

This was precisely the consequence in People's Poland, and throughout the socialist world. As Włodzimierz Brus and Kazimierz Laski (1989, 30) have written, '[t]he Janus-faced state—as the presumed protector of the environment on the one hand, and the allocator of resources and the owner of the offending enterprises on the other—found itself in a schizophrenic position, without the possibility of effective use of even the habitual means of fighting environmental abuse (fines and the like).'

The Party/state's conflict of interest as owner and regulator took a number of forms. Enterprises in People's Poland were, for all practical purposes, government agencies (accord Malinowski 1984, 143; Madey and Rybicki 1971, 146). They were integral components of Party/state administration. Their primary mission was to implement Party/state socioeconomic policy, as expressed in central plans. But they were more than mere economic producers; they also served important political and social functions. Enterprises served as the basic unit of rank-and-file Party organization. Indeed, most citizens who belonged to the PZPR did so through their place of work. Larger enterprises, in particular, provided social services for their employees, including housing, shopping facilities, sports clubs, local cultural centers, vacation resorts, schools and day care centers. All of this gave socialist enterprises a tremendous, literally *governmental*, presence in the lives of their employees.

As agencies of government, state enterprises played a major role in economic and environmental policy making. That helps to explain why environmental fees and fines in People's Poland tended to be set too low to deter non-compliance (as we saw in Chapter 3). Enterprises also exercised considerable political influence over environmental law *enforcement*. Although this is also true of private firms in capitalist economies, the influence of socialist enterprises was of a different order of magnitude. As Marshall Goldman (1972a, 188) has written, government officials and enterprise managers in the socialist system had 'an identity of interests,' both suffered when funds were diverted from 'productive' activities to 'unproductive' environmental protection efforts (including pollution control and resources

conservation). In capitalist economies, by contrast, the interests of firms and government are diverse. And this diversity serves to dilute the influence of industry on such issues as environmental law and enforcement.¹⁸

One question that arises when the state owns regulated enterprises is *who regulates the regulator*. One of the first arguments for governmental regulation of environmental protection is that the state possesses far more coercive authority than private citizens or social organizations. Industrial concerns that could easily avoid or manipulate private claims *can* easily be made to comply with state mandates.¹⁹ If the state possesses the political will to regulate for environmental protection, it certainly has enough power to enforce it. And according to Cohen-Tanugi's theory, the state is much more likely to have the political will to enforce compliance with environmental regulations against firms it does not own. This has been confirmed by comparative studies of countries with varying degrees of state control over economic production. In countries such as Spain and Mexico, with a high percentage of state-owned industries, governments historically have shown little inclination to enforce compliance with pollution-control regulations (Leonard 1988, 213). On the contrary, state ownership has created inducements to shield enterprises from public scrutiny and accountability.

The Ukrainian writer Zhores Medvedev (1990a, 264–5), in a comparative study of nuclear energy regulations, found that the highest number of *reported* nuclear mishaps have occurred in the United States *because* it is 'the country that is most open about nuclear-related accidents.' Medvedev noted that most American nuclear power stations are privately owned but regulated by a government agency, the Nuclear Regulatory Commission. That governmental authority is supplemented by non-governmental watchdog groups, including anti-nuclear, consumer and environmental groups, making it very 'difficult to cover up even minor mishaps.' The state, as independent regulator, has the power and is more likely to have the political will to force private nuclear power plants to keep records, make reports and open facilities to public inspection. But in countries such as Great Britain and France, where the state owns and fully controls nuclear power plants, the state tends to use its coercive force to *avoid* detection and public scrutiny, primarily by restricting the flow of information. This same problem also persists in the United States to the extent that the federal government owns nuclear facilities. Indeed, both sides of Medvedev's thesis are nicely illustrated by reference to the American experience.

Private nuclear plants in the USA are subject to stringent regulation by the independent Nuclear Regulatory Commission (NRC). By contrast, publicly owned nuclear facilities, managed by the Department of Energy (DOE), are largely exempt from NRC licensing and enforcement. The DOE has often been accused of withholding information, falsifying documents and underreporting threats (see *Federal Contracts Reports*, Aug. 27, 1990; *Energy Daily*, Apr. 16, 1993). For example, when the US government's Hanford nuclear reservation emitted 340,000 curies of radiation into the air above Washington and Ore-

gon between 1944 and 1947, tens of thousands of exposed residents were never warned. They did not even learn of their exposure until 40 years later; the first public disclosure came in 1986, and then only after environmentalists filed a lawsuit to open classified government records (see *UPI*, July 13, 1990). By contrast, the 1979 accident at the privately owned Three Mile Island (TMI) nuclear power plant in Pennsylvania was attended by massive media coverage, which led to a public outcry about nuclear safety, federal investigation of the accident and new nuclear safety regulations. As Dan Reicher (1993, 583–4) has written, ‘[t]he most significant fallout from the TMI accident was institutional. . . . Since the accident there has not been a single new order for a nuclear power plant.’ However, Reicher (1993, 564–6) also argues that the government suffers from a substantial conflict of interest even with respect to *privately* owned nuclear power because the federal government has been a major proponent of nuclear power since World War II. This position is borne out, for example, by Congress’s enactment of the 1957 Price-Anderson Act (42 U.S.C. §2210), which greatly limited the financial liability of energy companies for nuclear accidents. It seems clear, nevertheless, that the US government has policed private nuclear power far better than its own nuclear facilities.

In countries where government ownership of polluting industries generates regulatory conflicts of interest, the question becomes whether there exists any independent authority with sufficient coercive power to force the state to comply with its own regulations. The implicit assumption is that governments cannot be expected to regulate their own activities effectively. There is ample evidence to support this assumption from virtually all countries, including the United States. For example, as Thomas J. DiLorenzo (1992, 111) has noted, the US Department of Defense ‘now generates more than 400,000 tons of hazardous waste a year—more than is produced by the five largest chemical companies combined. To make matters worse, the Environmental Protection Agency lacks the enforcement power over the public sector that it possesses over the private sector’ (also see Bettigole 1994; Gelpe 1989). However, the problem is not completely intractable.

In some countries, governments have given up their monopolies on environmental law enforcement. In the United States, for example, any private citizen or non-governmental organization can use the judicial system to compel the government to comply with its own environmental regulations (see Wald 1992). Private individuals and groups have successfully exercised this authority on many occasions to, among other things, require the Army to comply with the National Environmental Policy Act,²⁰ force the Navy to obtain a Clean Water Act discharge permit,²¹ and require the EPA Administrator to comply with statutory directives.²² As a result, problems arising from regulatory conflicts of interest have been reduced (though never eliminated). It must be stressed, however, that this method of reducing regulatory conflicts can be effective only in states committed to the rule of law; the legal empowerment of citizens and non-governmental organizations is meaningless unless the government truly is subject to their power.²³

The formerly totalitarian regimes in Central and Eastern Europe could not, by definition, give up their monopolies on environmental law enforcement. To totalitarians, political (including, in this context, legal) power is a zero-sum game. Giving up substantial law enforcement powers to non-governmental organizations and private citizens would have entailed an unacceptable reduction in Party authority. More to the point, it would have required the Party/state to render itself *legally* accountable for environmental law enforcement. In other words, it would have required the institution of the rule of law. But that was unthinkable.

Even in People's Poland, where citizens and non-governmental organizations had limited legal authority to participate in environmental decision making (under the 1980 Environmental Protection and Development Act and the 1984 Land-Use Planning Act), the Party/state could not be held accountable for implementing its own environmental rules. Private citizens could challenge individual land-use decisions in the High Administrative Court; they could seek compensation for pollution damage in civil court; and officially recognized social (environmental) organizations could participate in administrative permitting and land-use decisions. But no one could force the Party/government against its will to take action against environmental violators. Poland's High Administrative Court had no jurisdiction to require administrators to promulgate or enforce environmental regulations. The Constitutional Tribunal, which was appointed in 1985 to assess the constitutionality of laws and the legality of regulations (1985 Dz.U. No. 22, item 98), likewise had no jurisdiction to order the Party/government to issue or enforce environmental mandates.²⁴ Even if there had been some *legal* mechanism for non-governmental environmental law enforcement in People's Poland, it would not have been effective because, in the end, the law did not rule in People's Poland, the Party did. Given this political-economic fact of life, there is little else the Party/government could have done to avoid or substantially reduce its conflict of interest as environmental regulator and nominal owner of the means of production. So there was no way for it to avoid or minimize the environmental consequences of that conflict.

The Party/state's conflict of interest as owner and regulator of the means of production was replicated at the ministerial and lower levels of state administration where development responsibilities were frequently combined with environmental protection mandates. In the 1950s, the Forestry Ministry, which had primary responsibility for forest development activities, was charged with implementing the 1949 Nature Protection Act. The 1962 Water Law made industrial ministries responsible for imposing water pollution control conditions on their own development activities. And in the 1980s, the lead agency for environmental protection had economic development responsibilities that compromised its environmental mission: the Ministry of Environmental Protection and Water Management, instituted in 1983, was responsible for ensuring water supplies for industrial use and irrigation. At the regional level of administration, governors (*wojewodowie*) were responsible for both environmental law enforcement and

fulfilling regional development plans, but their performance in office was judged solely on their record of political obedience and plan fulfillment. They had little to gain and potentially much to lose from strict environmental law enforcement; on the other hand, they stood to lose little or nothing from ignoring environmental mandates (see Jendroška and Sommer 1994, 186–7).

To this day in post-Communist Poland, the Ministry of Environmental Protection, Natural Resources and Forestry remains substantially responsible for water *use*, forest development and mining activities. As a result of these intra-ministerial conflicts of interest, environmental responsibilities are still frequently compromised. As Olimpiad Ioffe and Peter Maggs (1987, 277) have noted, ‘the agency assigned both to exploit and protect a resource is unlikely to do a good job of protecting the resource against its own depredations.’²⁵

Soft Budget Constraints in the ‘Shortage Economy’

The Party/state’s conflict of interest as regulator and owner of the means of production was reflected in the budget constraint. Implicit in the ‘production for production’s sake’ mentality of socialist economics was what the Hungarian economist János Kornai (1986a) calls the ‘soft budget constraint’. A firm’s budget constraint is hard or soft depending on its degree of economic independence and self-reliance. It is said to be (relatively) hard if the firm must profit in the marketplace to survive, but ‘soft’ if the firm is (relatively) oblivious to profits and costs because its survival is determined not economically, but politically or administratively through the use of subsidies, tax breaks, relaxed environmental standards, etc.

In the former socialist economies, budget constraints were chronically soft (despite occasional and inconsistent efforts to harden them). We already have seen that the bonus structure for enterprises was completely oblivious to profits and losses; only physical production levels mattered. Given that, it is hardly surprising to find that socialist enterprises rarely went out of business; those that did were comparatively small and unimportant to the national economy. The best guarantor of survival for socialist enterprises was not profit, but size and political influence. The larger an enterprise—the more jobs it provided and the more it produced—the greater its political clout and the higher its level of subsidization. So every enterprise’s first priority was to grow by using all the political clout it could muster to maximize its allotment of inputs from the center (Clark and Wildavsky 1990, 192–3). Socialist enterprises, which were large to begin with, grew larger. The larger they grew, the less efficient they became (reflecting diseconomies of scale in production) and the more subsidies they required. A vicious cycle was created. In Poland, the least profitable industries—usually coal mining and food production—regularly received the largest annual ‘investment’ gains from the center. This led to the perverse result that the leading loss makers (and polluters) in the economy ended up with the highest final ‘profits’ after

subsidies (Nuti 1990, 176). Indeed, in 1982 subsidies for ‘financially troubled’ enterprises in Poland amounted to 44 percent of total enterprise profits, and ‘represented the largest single item in the government’s civilian budget expenditures’ (Prybyła 1989, 198–9). Even profitability was negotiable in the socialist economy (see Kamiński and Sołtan 1989, 381). So enterprises had little incentive to conserve investment resources, including natural resources; on the contrary, they had every reason to maximize their use.²⁶ Resource inputs were available to producers virtually price free and, with every enterprise maximizing resource use, shortages of producer goods became a chronic problem. In the closely intertied socialist economy, shortages in one sector created production bottlenecks that reverberated throughout the entire economy.²⁷ Enterprises rationally responded to production bottlenecks and input shortages by hoarding resource inputs, which led to further shortages and production bottlenecks.

Shortages reinforced the goal of maximizing production, further exacerbating the Party/state’s regulatory conflict of interest and increasing the leverage of industrial enterprises and ministries over environmental protectors in the Party/state’s administrative hierarchy. Who would dare complain of pollution coming from a paper factory (to take a realistic example) in the midst of a toilet paper shortage? Of course, if some unthinking sanitation or environmental inspector did try to penalize or shut down the factory, the Party/state always could intervene and either curtail the action (for reasons of ‘higher necessity’) or compensate for penalties, that is, further soften the budget constraint.

5.6. Conclusion

Given the various endemic obstacles to environmental law enforcement created by the socialist economic system, it is easy to understand why environmental protection was largely ineffective in People’s Poland. Indeed, we may well ask whether environmental protection could ever be successful in *any* socialist economy, at least if regulatory conflicts of interests and other inducements to soften budget constraints are as inevitable as they appear to be. I take up that question in earnest in Chapter 8. At this point, it is enough to recognize that the obstacles discussed in this chapter *were* structural. They were not intended or designed to obstruct environmental protection, but that was their effect. And they lend support to the argument that environmental protection failed in People’s Poland (and throughout the Soviet bloc) not because of negligence but primarily because of the Communist political-economic system.

That system was, of course, premised on ideological principles of Marxism–Leninism, some of which have been addressed in this and earlier chapters. Chapter 6 takes a closer look at the ideological origins of communism in the writings of Marx, Engels and Lenin to see if they provide some clues as to why the system was so poorly suited to the task of environmental protection.

Notes

1. A few neo-Marxists, such as Jan Tinbergen (1969, 593–5), have argued that state ownership of the means of production is not a necessary attribute of socialism (also see Lerner 1970).

2. Polish theorists only began addressing this question in the 1970s (see Kozyra-Kowalski 1977).

3. It is interesting to note the symmetry between this Marxist view of the relationship between society and economy and the Marxist view of the relationship between society and nature. According to Marx, the history of economic progress has, in essence, been the struggle to reverse nature's control over man. For more on this, see Chapter 6 (§6.1.).

4. James Gleick (1987) suggests that completely accurate long-range weather forecasting would be impossible even with a computer of unlimited processing power because of 'chaotic' interactions in the atmosphere. This also may have implications, of course, for socialist central planning.

5. Only five-year and one-year plans had to be approved by the parliament. All other plans and plan revisions could be promulgated as regulations by the Council of Ministers.

6. On Marx's historical materialist theory of production, see Cohen (1978, 206).

7. Indeed, some of Marx's own writings (e.g., Marx and Engels 1978, 471–2; 1967, 78–9, 443–4) seem to support the notion that socialism might be successfully established in countries at lower levels of economic development.

8. The 1982 reforms were also hindered by the Jaruzelski regime's contradictory efforts at 'normalization' (meaning the reestablishment of PZPR control) during Martial Law (see Bielasiak 1988, 103).

9. For more on Poland's post-socialist environmental protection efforts, see Chapter 7.

10. This section and the next are revised versions of Cole (1995c).

11. OECD stands for Organization for Economic Co-Operation and Development. It is a consortium of highly industrialized capitalist countries, including Australia, Austria, Belgium, Finland, Germany (i.e., the former West Germany), Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Since the fall of communism, three former Soviet bloc countries—Poland, the Czech Republic and Hungary—have joined.

12. CMEA stands for Council for Mutual Economic Assistance, a group created in 1949 to facilitate international trade and relations between Communist countries. Before its break-up in 1991, the CMEA included Bulgaria, Cuba, Czechoslovakia, East Germany, Hungary, Mongolia, Poland, Romania, the Soviet Union and Vietnam. Yugoslavia was a 'limited participant.'

13. It may seem anomalous that Soviet military and space innovations had so few applications in the civilian economy, but it was predictable given the Soviets' preoccupation with external and internal security and their economic system's structural disregard for economic efficiency.

14. But see Poznański (1980, 243), concluding that environmental protection requirements *did* induce enterprises to make some technical changes in production.

15. I am grateful to Tomasz Żylicz for pointing this out.

16. This is not to say that profit was without consequence for enterprises. Profits were an important *secondary* source of investment funds (see Crane 1992, 62). However,

the very concept of 'profit' is suspect in a system where prices are administratively determined; the earning of profits is no indication of economic efficiency (see S. Gomulka 1986, 167). As Jadwiga Staniszkis (1992, 41) has noted, 'profit is not a synonym for rational economic action, even at a micro level.'

17. Even though most agricultural *lands* remained privately owned in Poland, it should be noted that agricultural *production* remained subject to Party/state planning and control. Party/state agricultural policy was designed to discriminate against private farmers and encourage their 'voluntary' socialization. However, these efforts were largely unsuccessful (see Wilkin 1989).

18. In Chapter 7 (§7.5), I explain how the influence of economic enterprises over environmental protection has waned in post-Communist Poland because of privatization, increased competition and the imposition of harder budget constraints throughout the economy.

19. Historical analyses of private tort actions against polluters indicate how difficult it was for plaintiffs to obtain compensation for, let alone prevent, pollution damage (see, e.g., Dewees 1992).

20. *Foundation on Economic Trends v. Weinberger*, 610 F.Supp. 829 (D.D.C. 1985).

21. *Romero-Barcelo v. Brown*, 643 F.2d 835 (1st Cir. 1981).

22. See, for example, *Natural Resources Defense Council v. Train*, 411 F.Supp. 864 (S.D.N.Y. 1976), requiring the EPA to establish national ambient air quality standards for lead under the Clean Air Act (42 U.S.C. §7408), after the Administrator found that lead emissions posed a pervasive threat to public health and welfare.

23. The importance of the rule of law for effective environmental law enforcement is discussed in Chapter 8 (§8.6).

24. On Poland's Constitutional Tribunal, see generally M. Brzezinski (1993a).

25. Of course, this problem is not system specific. One needs only consider the travails of the US Forest Service, in the Department of Agriculture, to realize that this conflict of interest arises just as easily in the management of public resources in capitalist countries. On the normative implications of such regulatory conflicts of interest, see Chapter 8 (§8.4).

26. This obviously relates back to the discussion in §5.4 about systemic impediments to increased resource conservation under socialism.

27. On endemic shortages in the socialist economic system, see Kornai (1992a, esp. chaps. 11 and 12; 1980). Interestingly, Jozef Stalin may have been the first to comprehend the phenomenon of the shortage economy. The following quote is attributed (in Pryor 1973, 355n40) to Stalin: 'in the capitalist countries . . . the errors of single capitalists, trusts, syndicates, or this or that capitalist group are corrected through the elementary force of the market. . . . No really important error, no considerable overproduction, no appreciable discrepancy between production and . . . demand can occur in the capitalist countries without the mistakes, errors, and discrepancies being corrected by this or that crisis. . . . With us it is quite different. Every important disturbance in trade or in production, each error in calculation in our economy does not end with just a partial crisis, but affects the whole economy.'

Chapter 6

THE IDEOLOGICAL DIMENSION: MARXISM AND THE ENVIRONMENT

Many of the legal, political and economic contributants to the underenforcement of environmental law in People's Poland discussed in preceding chapters had roots in Marxist–Leninist ideology; indeed, we have already touched on some important ideological issues in Chapters 3–5. The purpose of this chapter is to further elucidate ideological underpinnings of the socialist system that contributed to the failure of environmental protection in People's Poland. The intent is not to lay 'blame' at the feet of some long-dead political theorist (who, after all, never claimed to be an environmentalist), but merely to draw legitimate connections between Marx's *ideas* and the ecological consequences of their (actual) implementation. Without those connections, the analysis of institutional impediments to environmental law enforcement under socialism would be incomplete (see North 1984, 10).

The nature of the connection between Marxist theory and the Communist regimes of the former Soviet bloc has always been controversial. Some Marxist and neo-Marxist scholars have argued (and continue to argue) that the regimes of the former Soviet bloc were not 'Marxist' in any meaningful sense of that term; Marx's theories, they contend, were fundamentally inconsistent with Soviet-style totalitarianism (see, e.g., Abel 1990). It seems clear, however, that Marx's most influential Russian interpreters at least *intended* to implement and *believed* they were implementing Marx's theories. As Martin Krygier (1994a, 139) has written, the Communist revolution in Russia 'was not simply the victory of a group of power-hungry thugs, but of zealous, driven, often brilliant people deeply committed to implementing a body of ideas, which they knew as Marxism.' Whether or not Marx was in any way 'responsible' for Soviet-style totalitarianism, Leninism and Stalinism were logical applications, if not the only logical applications, of Marx's theories (see Kołakowski 1978a, 419).

This chapter, in any event, concerns the contributions of Marxist theory to the failure of environmental protection in Poland and throughout Eastern Europe and the former Soviet Union. Because Marxist ideology was universal and fundamental in all these countries, this chapter takes a somewhat broader approach, focusing on the entire region, rather than on Poland exclusively.¹

6.1. Introduction

Marx, Engels and Lenin wrote little on specifically environmental matters, but much of what they wrote about economics, politics and law indirectly (and sometimes directly) contributed to the failure of environmental protection efforts in People's Poland and the rest of the former Soviet bloc. This chapter analyzes four elements of orthodox Marxism related to environmental protection that were institutionalized throughout Central and Eastern Europe: (1) the Marxist attitude toward nature; (2) the concept of socialist property; (3) the labor theory of value; and (4) Marxist theories of law and state.

The reader should bear in mind that the arguments and analyses in this chapter are not about *the* theory of socialism. There are many different socialist theories. Marx's was neither the first nor the last; it was only one theory or, more accurately, one *family* of socialist theories. If socialism were an item of manufacture, Marxism would be a vast, socially owned conglomerate with numerous highly independent subsidiaries, each producing its own distinct brand. It is important, therefore, to distinguish the Marxism of Marx from the Marxism of the Marxists (see Kołakowski 1978a, 182–218). My analysis is restricted to what has been called 'orthodox' or 'classical' Marxism: the Marxism of Marx, his colleague Engels and, to a lesser extent, Lenin. *Their* Marxism was, in fundamental respects, intellectually incompatible with environmentalism and, as institutionalized in Soviet-style communism, impeded effective environmental protection. This is not to say that one can no longer claim to be both a 'Marxist' (of some sort) *and* an environmentalist (see, e.g., Pepper 1993). But it would be a Marxism fundamentally different from Marx's own. In other words, an environmentally friendly socialism or 'eco-socialism' is necessarily post-Marxian.

6.2. Marx, Engels and Lenin on the Relationship between Humans and Nature

Since the 1970s, historians, environmentalists and political commentators have shown intense interest in what Marx, Engels and Lenin thought about the relationship between humans and the natural environment. This is somewhat ironic because for Marx, Lenin and, to a lesser extent, Engels, the natural environment was not a particularly interesting subject, except insofar as it provided a necessary basis for socioeconomic relations among people.² Despite efforts by later Marxist writers, such as Howard Parsons (1977), to portray Marx and Engels as early environmentalists, it is clear that they were nothing of the kind. Parsons' book catalogues virtually every writing by Marx or Engels that touches, however tenuously, on nature. Along the way, Parsons provides commentary, explanations and apologies. His ardent desire to view Marx and Engels as early environmentalists unfortunately leads him too frequently into untenable or incredible

interpretations. To take just one example, Parsons (1977, 55) quotes the following language from a letter Engels wrote to his friend Pyotr Lavrov: 'the idea of solidarity could finally . . . grow to a point where it will embrace all mankind and oppose it, as a society of brothers living in solidarity, to the rest of the world—the world of minerals, plants, and animals.' The first problem with this passage as proof of Engels' environmentalism is that the language was not Engels' but Lavrov's; Engels was quoting from Lavrov's earlier letter to him (see Engels 1975d, 369). That problem aside, Parsons' interpretation of the passage strains credulity. He interprets Engels' use of the word 'oppose' to mean 'united with.' Even if we accepted this interpretation, against all reason, it hardly would qualify Engels (or Lavrov) as an early environmentalist.³ In fact, the writings of Marx and Engels display a consistent economic/utilitarian and anthropocentric attitude toward nature. Several of their theories are implicitly or explicitly hostile to the environment. While recognizing that humans are part of nature, Marx and Engels describe the entire course of human history as an effort by 'man' to gain dominion over nature and, thereby, become truly free. They foresaw that this would happen under communism.

The concept of human domination of nature recurs throughout their writings. In Volume I of *Capital*, Marx (1967, 514) wrote, '[i]t is the necessity of bringing a natural force under the control of society, of economising, of appropriating or subduing it on a large scale by the work of man's hand, that first plays the decisive part in the history of industry.' Engels (1940, 306), in *Dialectics of Nature*, added that 'it is precisely the alteration of nature by men, not solely nature as such, which is the most essential and immediate basis of human thought, and it is in the measure that man has learned to change nature that his intelligence has increased.' This interaction between humans and nature occurs regardless of the means and relations of production, but Marx and Engels maintained that humans would gain complete dominion over nature only under socialism. In the *Anti-Dühring* (1975c, 270), Engels wrote:

With the seizing of the means of production by society, production of commodities is done away with, and, simultaneously, the mastery of the product over the producer. Anarchy in social production is replaced by systematic, definite organization. The struggle for individual existence disappears. Then for the first time man, in a certain sense, is finally marked off from the rest of the animal kingdom, and emerges from mere animal conditions of existence into really human ones. The whole sphere of the conditions of life which environ man, and which have hitherto ruled man, now comes under the dominion and control of man, who for the first time becomes the real, conscious lord of nature, because he has now become master of his own social organization. The laws of his own social action, hitherto standing face to face with man as laws of nature foreign to, and dominating him, will then be used with full understanding, and so mastered by him. Man's own social organization, hitherto confronting him as a necessity imposed

by nature and history, now becomes the result of his own free action. The extraneous objective forces that have hitherto governed history pass under the control of man himself. (cf. Marx 1967, vol. III, 820)

These are not the words of a nature lover. On Engels' view, the entire history of the human race is the struggle to overcome the external forces of nature that bind it, and to subordinate nature to serve human purposes.

Unlike nineteenth-century preservationists, such as John Muir, Marx and Engels expressed no special reverence for nature, or contempt for human activities that altered it. Rather, Marx and Engels wrote in the language of mainstream nineteenth-century European intellectuals, reared in modernism, scientism and the Judeo-Christian value system. They displayed an immense faith in science and the conviction that humans had to subdue nature for their own purposes. This hardly distinguished them from capitalist writers of the same era who, like Marx, viewed contemporary man as *homo-oeconomicus*, driven by needs, wants and productive relations. Even Parsons (1977, 67) concedes that 'Marx and Engels agreed with the capitalist "strategem" to "subdue" nature for "human requirements."'

Lenin, like Marx and Engels, wrote little specifically about the natural environment, but he certainly agreed that the primary purpose of nature was to serve human needs. His writings on the subject of natural resources development displayed, in the words of Zigurds Zile (1971, 85), a 'rather crude economic utilitarianism,' suggesting that 'if one only digs, dams, drains, plants, breeds, and irrigates, he can satisfy humanity's needs.' Lenin embraced the Marxist notion that human history is the story of the struggle to, first, grasp the laws of nature and, then, consciously and rationally manipulate nature for the benefit of society. This conception of nature 'justifies classification of animal and plant life into useful and useless,' as Zile (1971, 86) suggests; '[i]t can doom the wolf as nothing but trouble and elevate the carp and lamprey for their high protein yield.'

One could hardly pick up a Soviet publication on nature during the past half-century without reading a tribute to Lenin as the father of Soviet conservationism. However, this reputation was undeserved. Lenin's actions, like his writings, showed that he was far less interested in preserving than in fully exploiting natural resources. Although it is true that several nature conservation laws were enacted during his lifetime, and relatively few for decades after his death (see Goldman 1972a, 16), the laws enacted while Lenin lived are better characterized as natural resources *use* laws, rather than nature preservation laws (see Zile 1971, 95). Those that genuinely were preservationist merely restated, for the most part, pre-revolutionary statutes. And there is scant evidence that Lenin personally was involved with any of the legislation. The most that can accurately be said is that Lenin thought conservation a laudable goal so long as it did not hinder economic development (see Goldman 1972a, 18). This hardly distinguished Lenin's utilitarian view of nature from Marx's.

6.3. Property Relations in Natural Resources and the Means of Production

Marx's property theory related to his conception of nature. Capitalism, by advancing the forces of production, takes society a long way toward subduing nature, but at great cost. Marx viewed capitalist social relations as inherently antagonistic, creating conflicts among people, and between people and nature. Communism, according to Marx's theory, would provide 'the genuine resolution of the conflict' (Marx 1964b, 135), first and foremost by abolishing the primary determinant of capitalist socioeconomic relations: private property. By abolishing private property entitlements and the exploitative relations they create among people and between people and nature, communism supposedly would provide the necessary preconditions for humans to work together in 'solidarity,' as Engels (quoting Lavrov 1975d, 369) put it, in opposition 'to the rest of the world—the world of minerals, plants, and animals.' Freedom consists in 'socialist man,' Marx wrote (1967, vol. III, 820), 'the associated producers, rationally regulating their interchange with Nature, bringing it under their common control, instead of being ruled by it as by the blind forces of Nature; and achieving this with the least expenditure of energy and under conditions most favourable to, and worthy of their human nature.'

Marx and Engels were concerned mostly with capitalism's private property entitlements as they affected relations among people, but they also pointed to the negative environmental effects stemming from private ownership of the means of production. In *The Condition of the Working-Class of England in 1844*, Engels (1958, 110) wrote of life in the squalid quarters of the urban working poor, surrounded by dung-heaps that poisoned the air and waters:

The way in which the vast mass of the poor are treated by modern society is truly scandalous. They are herded into great cities where they breathe a fouler air than in the countryside which they have left. They are housed in the worst ventilated districts of the towns; they are deprived of water because this is only brought to their houses if someone is prepared to defray the cost of laying the pipes. River water is so dirty as to be useless for cleansing purposes. The poor are forced to throw into the streets all their sweepings, garbage, dirty water, and frequently even disgusting filth and excrement. The poor are deprived of all proper means of refuse disposal and so they are forced to pollute the very districts they inhabit. (cf. Marx 1967, vol. I, 661–3)

Marx and Engels reviled the environmental failings of nineteenth-century capitalism's private property-based regime. They intuited that the abolition of private property entitlements would end the squalor; pollution and other environmental problems would cease once natural resources were socially owned and managed not to maximize profits for the few but to maximize welfare for the masses. Neither Marx nor Engels ever made this claim explicitly, but it is implicit in their con-

demnations of the capitalist system. Aside from a few general statements about socialism's capacity for reconciling people and nature (under human dominion of course), they made no claims about the specific environmental effects of the socialist system they advocated. Nevertheless, throughout the twentieth century, supporters of Marxist socialism have proclaimed socialist ownership of natural resources self-evidently more protective of the environment than any private property regime (see, e.g., Parsons 1977, 92; *World Marxist Review*, June 1972). It may have been self-evident in theory, but it was not borne out in practice.

As we saw in Chapter 1, People's Poland suffered from a chronic environmental crisis as bad or worse than any in the experiences of the capitalist West, despite social ownership of most property, natural resources and the means of production. The same was true throughout the former Soviet bloc. The persistence of acute and chronic pollution problems in centrally planned economies vexed ardent socialists, whose attempts to explain them away grew increasingly dubious as the evidence of environmental destruction mounted. Into the 1970s, they routinely claimed that the Soviet Union and Eastern Europe simply did not suffer from the environmental problems that plagued the capitalist West (see Komarov [pseud.] 1980, 116–17). When news began leaking out about environmental problems in socialist countries, Party/state officials and their Western supporters alternately claimed that (1) the problems were 'accidental' and far less serious than environmental problems in the West (see Parsons 1977, 101; Ziegler 1987, 26); (2) the problems were fundamentally different in kind from environmental problems in the West because social ownership and rational central socioeconomic planning could quickly and painlessly resolve them (see Parsons 1977, 92; Gerasimov 1975, 11), and (3) the environmental disorders in socialist countries were caused by international capitalism—the USSR and Eastern European countries were forced to industrialize rapidly and single-mindedly in order to deter attack and destruction from the West (see Parsons 1977, 91). The evidence, however, suggested otherwise. The chronic environmental problems of the former Soviet Union and Eastern Europe were *not* different in kind from those of Western countries; if anything, they were more severe. Allegations of capitalist conspiracies aside, there was plenty of evidence of simple neglect and malfeasance. Examples abounded of environmental problems that, once discovered, were *not* quickly and painlessly remedied by rational central planning. Indeed, the combination of social ownership of the means of production and central socioeconomic planning may have created many more environmental problems than it solved. The destruction of the Aral Sea, in former Soviet Central Asia, provides a perfect illustration.

The Aral Sea is a large, shallow and saline lake in Central Asia. In 1960, it was the world's fourth-largest lake by area, measuring 68,000 square kilometers. By 1987, it was only the sixth-largest lake in the world; its area had diminished by 40 percent, and its volume had fallen by 66 percent. The reason for the change was centrally planned irrigation. Soviet planners concluded that the fresh waters flowing into the Aral Sea were more valuable for irrigation than for preserving

the region's ecosystem, despite continued warnings from scientists of serious environmental repercussions. Over the course of three decades, beginning in the 1950s, irrigation in the Aral Sea basin increased by more than 40 percent, from 5 to over 7 million hectares, and water consumption doubled. As the sea receded, 75 percent of its native fish species were lost, taking with them a formerly lucrative commercial fishing industry. The newly exposed bottom lands were high in salt content, which made them resistant to vegetation and susceptible to erosion. The winds blew up great dust storms, which deposited the toxic salt on valuable agricultural lands, killing crops. Meanwhile, the region's climate changed so dramatically, becoming so much warmer and less humid, that area farmers could no longer grow traditional crops (see Pryde 1991, 221–5).

The destruction of the Aral Sea, like dozens if not hundreds of other large-scale environmental catastrophes throughout the former Soviet Union and Eastern Europe, belied the apologetics of socialist governments and their supporters. First of all, it was no accident. It resulted from the conscious decisions of socialist central planners guilty of the same kind of economic shortsightedness that caused so many environmental problems in the West. Once environmental problems appeared in the Aral Sea basin, central planning (combined with bureaucratic inertia) proved singularly incapable of ameliorating them. It is doubtful that planners believed they had to sacrifice the Aral Sea in order to boost production, so that the USSR could continue competing economically with the capitalist West. But even if they did, that hardly denotes an international capitalist conspiracy to destroy the Soviet Union. Decisions to divert waters from the Aral Sea evidently were based on domestic considerations stemming from the Soviet Union's preoccupation with large-scale economic development to fulfill Marx's promise of perpetual economic progress under socialism.

How could this have happened under centrally planned socialism? The problem was that Marx, Engels and many of their followers simply assumed that socialization of property rights would automatically improve environmental protection by facilitating scientific socioeconomic planning. What they did *not* consider, and what most economists understand very well today, is that social ownership of resources can actually make environmental problems worse. In *Capital*, Marx (1967, vol. I, 732–3) wrote of the 'robbery of the commons' under capitalism, but he apparently failed to consider the potential for even greater despoilation of the commons under social ownership. In theory social ownership means that everyone owns and is responsible for preserving resources; but in practice it has meant that no one owns or is responsible for anything. More than 2,000 years ago, Aristotle (1941b, at 1262^b34–35) wrote 'that which is common to the greatest number has the least care bestowed upon it.' Today this observation is known as the 'tragedy of the commons.' In 1968, Garrett Hardin (1995) published his classic article by that title, which described the free-rider problem of 'common' property (by which he clearly meant non-property or *res nullius*⁴) resources. Hardin posits a pasture open to all herdsmen for cattle grazing. Assuming that each herdsman

is rational, they will seek to maximize their individual benefits from the pasture. Each will ask, '[w]hat is the utility to *me* of adding one more animal to my herd?' In other words, they will undertake a cost-benefit analysis to determine whether adding an additional animal to their herd on the commons will provide a net gain or loss. The benefit side of the equation is 'a function of the increment of one animal.' According to Hardin, '[s]ince the herdsman receives all the proceeds from the sale of the additional animal, the positive utility is nearly +1.' The cost side of the equation is 'a function of the additional overgrazing created by one more animal.' But these costs would not be borne solely by the herdsman who adds the additional animal; rather, they would be spread among all the herdsmen who use the pasture. Thus, 'the negative utility for any particular decision-making herdsman is only a fraction of -1.'

Adding together the component partial utilities, the rational herdsman concludes that the only sensible course for him to pursue is to add another animal to his herd. And another; and another. . . . But this is the conclusion reached by each and every rational herdsman sharing a commons. Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit—in a world that is limited. Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all. (Hardin 1995, 133)

Unregulated common ownership or non-ownership thus can lead to rational overuse and even destruction of scarce natural resources. It also can lead to problems of pollution. According to Hardin (1995, 135), '[t]he rational man finds that his share of the cost of the wastes he discharges into the commons is less than the cost of purifying his wastes before releasing them. Since this is true for everyone, we are locked into a system of "fouling our own nest," so long as we behave only as independent, rational, free-enterprisers.'⁵

The environmental tragedies of Eastern Europe and the former Soviet Union conformed to Hardin's thesis. Indeed, the environmental history of socialism in the former Soviet bloc can be seen as one giant 'tragedy of the commons' (see Goldman 1972, 74). Although some Marxist scholars (such as Parsons 1977, 236) reject Hardin's theory out of hand as a '[s]uperficial dismissal of Marxism,' it is, in fact, neither superficial nor necessarily dismissive of Marxism. Hardin's theory raises doubts about the ability of any society, including a Communist one, to regulate itself, but it does not proscribe common ownership of property (*res communes*); it only repudiates *unregulated* common ownership or non-ownership of property (*res nullius*). For Hardin, privatization is only one (though, perhaps, a preferred) solution to the tragedy of the commons; regulated common (public, social or group) ownership, for example through the use of entry and use restrictions, is another.

Given the ideological premises of communism, privatization was not a viable option for avoiding the 'tragedy of the commons' in socialist economies; govern-

ment regulation was the only alternative. As we saw in Chapter 2, People's Poland undertook serious and substantial legislative efforts to regulate the environment. But, as we saw in Chapters 3–5, those efforts failed to avert ecological tragedy; they were obstructed by various institutions of Communist political economy. At least some of those institutions were premised on other important features of Marx's political-economic theories, particularly his labor theory of value and theories of state and law.

6.4. Marx's Labor Theory of Value

The labor theory of value is a logical outgrowth of Marx's utilitarian approach to nature—what distinguishes humans from other animals and brings about human mastery over nature is labor. As Engels (1940, 291) explained in *Dialectics of Nature*, 'the animal merely uses external nature, and brings about changes in it simply by his presence; man by his changes makes it serve his ends, he *masters* it. This is the final essential difference between man and other animals, and once again it is labour that brings about this distinction.' In *The Economic and Philosophic Manuscripts of 1844*, Marx (1964b, 145) concluded that the entire history of the world is defined by human labor. Along with the social ownership of property (natural resources and the means of production), the labor theory of value was central to Marx's entire political-economic system, and a major source of Marxism's popular appeal to workers (Maggs 1985, 359). Marx first outlined his labor theory of value in *Capital* to explain the exploitation of workers under nineteenth-century capitalism. Although recognizing that material wealth is the product of both labor and the base materials provided by nature (Marx 1967, vol. I, 41–3; see also Marx 1973, 472), Marx maintained that only labor invested the product with *real* economic value; nature's contribution, like capital's, was *economically* insignificant. In volume I of *Capital*, Marx (1967, 603) wrote, '[i]n the extractive industries, mines, &c., the raw materials form no part of the capital advanced. The subject of labour in this case is not a product of previous labour, but is furnished by Nature gratis, as in the case of metals, minerals, coal, stone, &c.' Later, in volume III (1967, 745), he added, '[n]atural elements entering as agents into production, and which cost nothing, no matter what role they play in production, do not enter as components of capital, but as a free gift of Nature to capital, that is, as a free gift of Nature's productive power to labour, which, however, appears as the productiveness of capital, as all other productivity under the capitalist mode of production.' The same sentiments appear implicit in Marx's *Grundrisse* (1973, 706): 'Nature builds no machines, no locomotives, railways, electric telegraphs, self-acting mules, etc. These are products of human industry; natural material transformed into organs of the human will over nature, or of human participation in nature. They are *organs of the human brain, created by the human hand*; the power of knowledge objectified.'

Marx was not the first, of course, to posit a labor theory. In his *Second Treatise of Government* (1963, 1–12), John Locke wrote,

Land which is wholly left to Nature, that hath no improvement of Pasturage, Tillage, or Planting, is called, and indeed is, *waste*; and we shall find the benefit of it amount to little more than nothing. . . . *Labour makes the far greatest part of the value* of things, we enjoy in this World; And the ground which produces the material is scarce to be reckoned in, as any, or at most, but a very small part of it. . . . *Tis Labour . . . which puts the greatest part of Value upon Land.*

But Locke's labor theory is different from Marx's. From Locke's perspective, labor creates 'the greatest part of Value'—perhaps as much as nine-tenths or even ninety-nine hundredths—but not quite *all* the economic value of a thing. Locke did not maintain, in contrast to Marx, that natural resources and capital contributed nothing to economic value. More importantly, Locke did not intend his labor theory as a complete theory of economic value; his claims about the relative contribution of labor to value are 'subsidiary' to his efforts to justify private rights in property by virtue of labor-mixing (Christman 1994, 51). Marx obviously had a very different (virtually opposite) end in mind for his labor theory of value; and unlike Locke's labor theory, Marx's was intended to determine (completely) exchange value. This distinction turns out to be critical from the point of view of environmental protection.

Marx's labor theory of value had implications for the economic concept of *scarcity*. For economists, natural resources have value because they exist in limited supplies, which are depleted over time by demand; the greater the rate of demand, the faster the supply is depleted. But, according to economic theory, as the supply of a certain resource falls, its value (denoted in markets by price) increases, reducing the rate of demand and, thereby, preventing (in theory at least) resource exhaustion. But by claiming that only human labor creates economic value, Marx implicitly rejected the economic theory of scarcity; under the labor theory of value, either resources could not be scarce or their scarcity could not make any difference in their (economic) valuation.

Marx's repudiation of scarcity value is not just implicit in his labor theory of value; it is also explicit in his attempts to refute Thomas Malthus's theory of the economic effects of population growth.⁶ For Marx, the environment and natural resources were constants. Any differentiation in social or economic value—for instance, the belief that gold was more valuable than lead—was mere commodity 'fetishism' (Marx 1967, vol. I, 71–5). Marx was right, of course, to recognize that social convention and culture influence economic valuation, but he was either naïve or disingenuous to suppose that there was nothing more to it. Clearly if gold were not scarce to begin with, that is, if supplies of gold were everywhere large enough to satisfy all potential demand, gold would have no economic value regardless of convention and culture; no one would be willing to pay anything

for it, so no market for gold would develop. Nor would there been a need for legal rules to protect property rights in gold. As with all natural resources (at least those that are useful in production and for which markets *can* be created), gold receives its economic value in the first place from its physical scarcity. But, as Charles Ziegler (1987, 10) has written, the notion of scarcity simply does not ‘fit into Marx’s framework.’ Marx presumed that central planning and high rates of technological innovation under socialism would ensure an adequate supply of air, water, land and minerals for any size population.

We saw in Chapter 5 (§§5.1 and 5.4) that Marx’s faith in technology was excessive. This was partly because of his denial of scarcity value. Scholars today realize what Marx apparently ignored: ‘technology alone cannot sustain an economy if erosion of the natural resource base deprives it of the materials required for meeting human needs’ (Caldwell 1990, 307). More to the point, technology cannot be expected to alleviate problems of scarcity in a political economy, like Marx’s, that fails to value scarcity in the first place. In the former Soviet Union, People’s Poland and the rest of the Eastern Europe, there was insufficient economic incentive to innovate in response to increasing (relative) resource scarcity. And, as we have seen, the economic and environmental consequences of that failure to innovate were disastrous.

As a cornerstone of Marxist economic theory, the labor theory of value attained a dominant position in the socialist countries. The result, as several authors have noted (for instance, Maggs 1985, 359–60; Kramer 1973, 364–73; Komarov [pseud.] 1980, 40; S. Gomułka 1986, 103), was massive waste and wanton destruction of the natural environment. Many ideologues in the Soviet Union and Eastern Europe nevertheless maintained almost until the very end of the Communist era that ‘nature has no value until human labor is added’ (see DeBardeleben 1985, 212–13). Consequently, as we saw in Chapter 5, the *real* costs of resource waste and environmental degradation were ignored in determining *official* costs and prices. To the extent that natural resources used in production were provided free of charge under the labor theory of value, industry had no incentive to conserve them (Ziegler 1987, 35–6). In addition, pollution and other environmental costs of production were externalized; they were not reflected in the prices of goods. So enterprises had no economic incentive to avoid waste, conserve resources or limit pollution (see, e.g., Goldman 1972a, 110). The free use of resources was neither a tacit policy nor a ‘legitimizing cloak for other motivations’ (DeBardeleben 1985, 260), but a specific and express goal of natural resources legislation in the former Soviet bloc.⁷

6.5. Marxist–Leninist Theories of Law and the State

Marx’s labor theory of value and other economic principles certainly were not the only reasons for the failure of environmental protection under socialism. As previ-

ous chapters have shown, the dominant political, economic and legal institutions bear a large measure of the blame for wasting natural resources and polluting the environment. Laws were poorly drafted and laxly enforced (when enforced at all). Planners and bureaucrats jealously guarded administrative turf and clung to environmentally destructive practices and methods of analysis that secured their authority. Most importantly, the party in power acted first and foremost out of concern for its continuing 'leading role.' The lack of political and legal accountability on the part of Party/state authorities and their tight grip on the flow of environmental information were major factors in the failure of environmental protection in People's Poland and throughout the former Soviet bloc.

No doubt many of the political, social and legal institutions of Soviet-style socialism would have disappointed Marx and Engels. They might have been shocked by the oppressions committed in Marx's name. More to the point, had Marx lived in Stalin's USSR, he might well have been among the victims of those oppressions. Nevertheless, the political, social and legal institutions of the former socialist countries all had some basis in Marxist theories of state and law. To some extent, Marx's theories legitimized the practices.

The Marxist-Leninist Concept of Law

Throughout the twentieth century, scholars have debated whether there is or even can be a Marxist theory of law (see Tay and Kamenka 1985, 217). Marx and Lenin were legally trained, and each wrote fairly extensively, if thinly (see Krygier 1994a, 154), about the law—mostly about its failings under capitalism. Neither believed law to be an independent determinant of social relations; it was merely part of the ideological 'superstructure' erected upon the economic 'base' of society.

In his earliest writings, Marx actually displayed a certain reverence for the law. For example, in his 1842 *Debates on Freedom of the Press* (1975b, 166), he wrote:

Laws are in no way repressive measures against freedom, any more than the law of gravity is a repressive measure against motion, because while, as the law of gravitation, it governs the eternal motions of celestial bodies, as the law of falling it kills me if I violate it and want to dance in the air. Laws are rather the positive, clear, universal norms in which freedom has acquired an impersonal, theoretical existence independent of the arbitrariness of the individual. A statute-book is a people's bible of freedom.

However, as Marx's political-economic theories matured, he either abandoned this liberal bourgeois view of law or failed to reconcile it with the more instrumental view of law he espoused later works.⁸ In his 1859 *Contribution to the*

Critique of Political Economy (1971, 20–1), for example, Marx wrote that legal relations were ‘rooted in the material conditions of life. When the economic foundation changes, the entire immense superstructure is sooner or later transformed.’ In Marx’s base and superstructure model, the economic foundation determines social relations. Legal (and other ideological) institutions are erected upon the economic base to reinforce the prevailing order. So legal relations are neither autonomous nor objective. The law’s natural and inevitable purpose is to reinforce the power of the ruling class.⁹ Marx illustrated this in *Capital* (1967, vol. III, 89–90) with stories of capitalists plying their influence in bourgeois parliaments, manipulating legislation to support their interests, and defying laws that diminished their profits. The notion of a ‘rule of law,’ applying equally to rich and poor, powerful and powerless, was for Marx a dangerous myth propagated to obstruct the rise of class consciousness (see Collins 1982, 139). Law had little, if anything, to do with justice. As Engels argued in *The State of Germany* (1975a, 29), ‘equality before the law’ meant only ‘equality in spite of the inequality of rich and poor—equality within the limits of the chief inequality existing—which means, in short, nothing else but giving *inequality* the name of equality.’ For Marx and Engels, then, law was an inherently coercive instrument of power. As James L. Hildebrand (1972, 47–8) has noted:

In Marxian theory, law is viewed as an emanation of the ‘state’ and is therefore fundamentally determined by economic relations. . . . Since the state is the product of the struggle of classes, dominated by the ruling class, law is viewed as a political *means* for maintaining the economic interests of the ruling class. Law is an ideological superstructure of society, constructed upon the economic basis, which reflects the materialistic outlook of the ruling class. Law is not oriented to the idea of ‘justice;’ rather it is a means of dominance and a tool of the exploiters or ruling class who use it in their own interests.

On occasion, the law might be used *against* the interests of the ruling class. Marx (1969–70) suggested in *The Class Struggles in France, 1948–50* that there were moments when the workers could achieve real, if limited reform through the legal process that the bourgeoisie had set up for its own protection. But, he maintained, the law in bourgeois society *never* could serve as a neutral determinant of social relations. Engels at first was completely pessimistic about the usefulness of law as a mechanism of social reform. In *The Condition of the Working-Class in England in 1844* (1958, 257–8), he argued that the law, as a creation of the bourgeoisie, ultimately benefits only that class:

The middle classes certainly are all in favour of the sanctity of the law. That is not surprising. They have made the law; they approve of it; they are protected by it and they gain advantages from it. The bourgeoisie appreciates that, even although some particular enactment may injure their interests, the whole body of

laws protects their interests . . . [T]he worker knows from long and bitter experience that the law is a rod which the bourgeoisie has in readiness for him. The worker has no confidence in the law and, if at all possible, he avoids it.

By 1890, however, Engels apparently had come to share Marx's more optimistic view that bourgeois law might prove to be a useful, even decisive tool in the hands of the proletariat. In a letter to J. Bloch (1969–70, 487), he wrote:

The economic situation is the basis, but the various elements of the superstructure—political forms of the class struggle and its consequences, constitutions established by the victorious classes after a successful battle, etc.—the forms of law—and then even the reflexes of all these actual struggles in the brains of the combatants, political, legal, philosophical theories, religious ideas and their further development into systems of dogma—also exercise their influence upon the course of the historical struggles and in many cases preponderate in determining their *form*.

So, did Marx and Engels believe in the positive value of law? The answer is unclear. There was no resolution of the apparent inconsistency between Marx's base and superstructure model and the idea that legal and political institutions could positively influence economically determined social relations. Even contemporary neo-Marxist scholars sometimes interpret orthodox Marxism as taking a generally cynical approach to laws that appear to be against the interests of the ruling class. Hugh Collins (1982, 75), for example, has noted:

[t]he . . . suggestion that some legal rules cannot be explained on a class basis at all, for example that laws prohibiting rape and assault further the interests of other kinds of groups or perhaps benefit everyone equally, is often casually dismissed as naive or the product of false consciousness. It is said that the dominant ideology portrays such laws as universally valuable in order to legitimate their authority, while in fact they form part of the general state apparatus for the oppression of subordinate classes.

On this view, simple legislation never could resolve society's problems because they are rooted in the economic base of the system. To eradicate them, the entire system has to be changed. Merely changing the law has the same effect as treating the symptoms of an illness: the patient might feel better for a short time, but he would not be cured, and his illness might even be prolonged.

In *The Communist Manifesto* of 1847–8 (1978, 490–1), Marx and Engels expressed confidence that the entire legal and political structure of the state would collapse soon after the workers' revolution radically altered the economic base of society. But in his later writings, Marx conceded that the transition period to communism might be protracted and that, in the interim, bourgeois law might

prove useful or even necessary ‘for proletarian purposes, until relative abundance was created and people formed new social habits’ (Tay and Kamenka 1985, 224). However, Marx never created a positive theory of what bourgeois law would become along the socialist road to communism (see Pashukanis 1951b, 270–1). Following Marx, Lenin conceded that bourgeois legal institutions would have to be maintained after the revolution in order to secure the road to communism.¹⁰ But, unlike Marx, Lenin showed no philosophical trepidation about the role of law in a socialist state. The pragmatic Lenin realized that law could be just as effective a tool for repressing enemies of the new social order as it was for repressing workers under bourgeois capitalism. Hugh Collins (1982, 91) has written that Lenin’s

legal system was a coercive organization which issued orders backed up by threats in the form of criminal codes. Together with the remainder of the state apparatus the law ensured that the wishes of the dominant class were carried out. Legal rules were in the basic form of commands addressed to the masses to do or to abstain from doing something, and the significance of the law in a society depended entirely upon its potential to affect behaviour by threats of sanctions.

In *State and Revolution* (1932, 23), Lenin wrote, ‘[t]he proletariat needs state power, the centralised organisation of force, the organisation of violence, both for the purpose of crushing the resistance of the exploiters and for the purpose of *guiding* the great mass of the population—the peasantry, the petty-bourgeoisie, the semi-proletarians—in the work of organising Socialist economy.’ Lenin held no illusions that the law would become an instrument of real justice under socialism; on the contrary, his skepticism about legality exceeded Marx’s. For Lenin, the law was simply a tool to be used in the revolution. A patina of legality could bolster the new regime’s international legitimacy, but be quickly discarded as the needs and goals of the revolution dictated (see Tay and Kamenka 1985, 234, 236–7). Following Lenin, the Soviet jurist Yevgeny Pashukanis (1951b, 279) argued that socialist legislation must ‘possess maximum elasticity;’ ‘we cannot fetter ourselves,’ he wrote, ‘by any sort of system.’ For Pashukanis, as for Lenin, the law necessarily occupied ‘a subordinate position with reference to policy.’

Given Marx’s instrumental view of law and Lenin’s contempt for and cynical use of legality, it is not at all surprising that scholars, lawyers and judges in socialist states had persistent difficulties reconciling Marxist–Leninist legal theories with increasingly formalistic legal procedures and practices. As Hugh Collins (1982, 139) has pointed out, ‘to be a Marxist and a lawyer promises to be a contradictory or schizoid experience.’ Socialist lawyers have searched incessantly for some balance between Marxist–Leninist legal theories and practical realities; between historical materialism and pragmatism; between bourgeois legality and the ongoing revolution, leading to stateless and classless communism.

But what does all of this have to do with environmental protection in the formerly socialist countries of Europe? The answer has been foreshadowed in

earlier discussions concerning law enforcement, particularly in Chapter 4. The inconsistencies of Marxist law, especially its ambivalence about legality, severely hampered environmental protection efforts in the socialist countries. We saw in Chapter 3 that most of the environmental laws in People's Poland were mere declarations, without specific standards or penalties. Such 'details' were left to planners, ministers, managers and other Party/state officials. And, true to Marxist–Leninist theory, administrators felt free to ignore or avoid environmental regulations in cases where enforcement would have been economically or politically inconvenient. In actuality, the environmental regulations of the socialist countries were not 'laws' at all, as liberal societies understand the term, but mere abstractions or ideals to be achieved gradually, if at all, from one five-year plan to the next (see Komarov [pseud.] 1980, 21). As a result, environmental protection (or the lack of it) in socialist countries had relatively little to do with what the laws said or did not say. As Peter Maggs (1985, 363) has written:

The environmental protection measures taken in the Soviet Union depend not upon the language nor upon the enthusiasm with which they are enforced, but upon the decision of state planning officials to order the construction, installation and operation of pollution control equipment and upon the incentives planners create to implement their orders. Thus, to find the applicable law of environmental protection in the Soviet Union is to look first at the internal guidelines of the State Planning Committee and second at the incentives and sanctions provided to ensure that environmental protection plans are fulfilled.

Legislative enactments thus had less 'legal' effect than the political and economic decisions of Party/state functionaries. This was true both in fact and by definition. In the 1930s, the Soviet Institute of Law of the Academy of Sciences defined the term 'law' 'in complete accord with the Marx–Lenin methodology':

Law is the aggregate of the rules of conduct expressing the will of the dominant class and established in legal order, as well as the customs and rules of community life confirmed by state authority, the application whereof is guaranteed by the coercive force of the state to the end of safeguarding, making secure and developing social relations and arrangements advantageous and agreeable to the dominant class. (Vyshinsky 1951, 336–7)

In Soviet society, the workers were said to be the dominant class. In reality, of course, it was their self-appointed 'vanguard,' the Communist Party. And, as the Marxist–Leninist definition of law ordained, the laws reflected that party's interest. Charles Ziegler (1987, 95) has noted that in the Soviet Union, laws were enacted in accordance with Party preferences (1) to serve as general state policy statements, vaguely guiding (but not compelling) the actions and decisions of state agencies and individual citizens, and (2) to educate the citizens in the 'spirit

of communist ideology.' Like all laws in socialist Eastern Europe and the USSR, environmental legislation primarily served a coercive political function, rather than a substantive environmental protection function.

Was this necessarily a function of Marxism–Leninism, or might the absence of the 'rule of law' in the former Soviet bloc be attributable to other factors, such as cultural history? The 'rule of law' certainly was not common currency in pre-revolutionary Russia and Eastern Europe. But, in this respect, Polish history is exceptional. As early as the sixteenth century, Poland had a well-developed parliamentary system of government that guaranteed civil and religious liberties including some, such as *habeas corpus*, that were not guaranteed elsewhere in Western or Eastern Europe for another 200–400 years (see, generally, Wagner 1988). Even if traditional cultural values did influence the conceptions of law in other East European countries, the Communists' instrumental view of law was, nevertheless, consistent with the teachings of orthodox Marxism.

The Dictatorship of the Proletariat

Marx implicitly rejected the 'rule of law' concept in his conception of a '*revolutionary dictatorship of the proletariat*' (Marx 1938, 18, italics in original). The concept of 'dictatorship,' Marxist or otherwise, implies a merger of legal authority and political power that is incompatible with the rule of law. This is nicely illustrated by an infamous event that took place in the Soviet Union shortly after the Bolshevik Revolution, an event that for decades has been cited as proof of Lenin's ardent commitment to nature protection. A man called Vever was caught felling trees, which was in fact his job, near Lenin's summer home on the Gorky government estate. Lenin had Vever arrested and summarily sentenced to one year in prison. As Ze'ev Wolfson has written (Komarov [pseud.] 1980, 63), this story accurately reflects the 'fundamental property' of the Soviet system of justice: 'power and the law are in the same hands.' Ironically, the moral Wolfson draws from the Vever story is the same lesson that Marx drew, more than a century earlier, from a remarkably similar episode, when the German *Landstag* debated a law revoking the peasants' customary right to gather wood in the forests. Marx at that time concluded that control over the state and the law should not be merged in the dominant class (see Kołakowski 1978a, 122). Apparently, he did not consider the merger of law and power inappropriate when it came to the proletarian dictatorship.

In *The Communist Manifesto* (1978, 500), Marx and Engels called for the workers to rise up, overthrow the capitalists and establish the revolutionary dictatorship of the proletariat to lead society to communism. Marx never precisely defined his use of the term 'dictatorship,' and that failure itself may have contributed to totalitarianism in the former Soviet bloc countries. Nevertheless, it is fairly clear from the context of his theory of politics and power that Marx

did not use the term in contradistinction to democratic rule. In fact, he viewed proletarian dictatorship as a *more* democratic regime than so-called democratic capitalism partly because it was a means for instituting full democracy under stateless communism. While Marx's conception of 'dictatorial democracy' may appear oxymoronic, it makes sense within Marx's theory of politics and the state. According to Marx's theory, all states are class-based dictatorships. If there were no classes (defined in the domination or repression of one by another), the state would be unnecessary and disappear. Therefore, 'every state is a dictatorship in content' (Ehrenberg 1992, 52). On this view, the label 'dictatorship of the proletariat' is just a euphemism for the workers' state, while the label 'liberal democratic republic' is a euphemism for the dictatorship of the bourgeoisie. Once we recognize that all states are dictatorial by nature, the question becomes why a society should prefer any given state, including the workers' state. Marx says it is not a matter of preferring the state that is not coercive since all states, as such, are naturally and unavoidably coercive; rather what makes one state preferable to another is the *aim* of the coercion. The dictatorship of the proletariat is said to be preferable to the dictatorship of the bourgeoisie because it is, by nature, more democratic. For Marx, the 'liberal democracies' were democratic in name only; in reality, they constituted a tyranny of the minority (the owners of the means of production) over the majority (the producers). The workers' state would simply reverse the order. It would be a tyranny of the majority over the small minority of capitalists (Ehrenberg 1992, 52). And that tyranny should be only temporary because, as the new socialist state would be so much more productive than the preceding system, all class antagonisms would sooner or later disappear, and democracy then would be fully extended; the socialist state, its purpose fulfilled, would disappear with the advent of communism. So, as Joseph Femia (1993, 70) has pointed out, for Marx 'communism' was a virtual synonym for 'democracy.'

This apparently Utopian strain in Marx's theory of the dictatorship of the proletariat notwithstanding, there is some evidence that Marx intended the word 'dictatorship' quite literally. He never said that a workers' dictatorship would be less repressive or coercive than other forms. He foresaw that the coercive powers of the state would be needed to consolidate the proletariat's gains and to repel counterrevolutionary efforts that might recur until all class antagonisms were extinguished (see Ehrenberg 1992, 5–6). Marx was also enough of a realist to understand that the working class at large could not effectively operate the coercive apparatus of state authority. As John Ehrenberg (1992, 154) has noted, Marx and Engels both identified the proletariat's struggle for power with 'the struggle of its *party* for exclusive political domination' (see also Femia 1993, 123). They supposed that a vanguard party would wield dictatorial power as a means of establishing real democracy, though this supposition obviously required a great deal of optimism (perhaps overoptimism) about human nature. Certainly it was more than Marx's rival, the anarchist Nikolai Bakunin, could bear. In *Statism and Anarchy*,

Bakunin (1971, 331) presciently predicted that ‘as soon as [the workers] become the rulers of the representatives of the people, [they] will cease to be workers and will look down at the plain working masses from the governing heights of the State; they will now no longer represent the people, but only themselves and their claim to rulership over the people.’¹¹ Indeed, almost from the very start, the chief motivation for Communist Party activities in the ‘People’s democracies’ was not the achievement of full democracy in communism, but the perpetuation of power and its perquisites (see Vavroušek 1990, 13).

The history of Soviet-style totalitarianism proved Bakunin right, of course, but was he *inevitably* right about Marx’s theory? Was the concept of ‘dictatorial democracy’ an oxymoron, or were Lenin and Stalin to blame for *abusing* Marx’s theory? The answer is, of course, debatable. But when Lenin (1960–70, 216) wrote that ‘[d]ictatorship means unlimited power based on force, and not on law,’ this was not logically inconsistent with Marx’s view, expressed earlier, that dictatorial use of the state’s coercive powers would be necessary following the proletarian revolution. Marx apparently had few misgivings about tyrannical *means* so long as they furthered the *democratic* end, and that end was reflected in the social basis, rather than the *legal* basis, of class rule (see Ehrenberg 1992, 108). Since Lenin claimed power on behalf of the workers (and the peasants), his dictatorship presumably would have satisfied, at least initially, Marx’s criteria (though Marx later might have come to regard it as a failure of democracy).

However Marx might have assessed Lenin and Stalin’s implementation of the proletarian dictatorship in the USSR, there is no doubt that it had serious implications for environmental protection. These implications may have been unintended, and they may (or may not) have been related to the *nature* or *aim* of the dictatorship. From a historical perspective, however, it is clear that dictatorial rule, with its concomitant lack of governmental accountability and limited public participation in decision making, impeded effective environmental protection. In many cases, the totalitarian instinct for self-preservation simply prevented Party/governments from taking any action against pollution because, as Ze’ev Wolfson has noted (Komarov [pseud.] 1980, 108), such steps could have led to ‘major changes in the system of power.’ As discussed in Chapter 4 (§4.2), taking action on the environment might have required reductions in industrial output and employment that would have undermined the legitimate claim to power of the so-called ‘workers’ parties (see Jancar 1987, 123). Environmental problems consequently tended to be marginalized, when they were not ignored entirely. Even good faith efforts to protect the environment were hindered by the Party/states’ conflicts of interest as regulators and owners of regulated industries.

We also saw in Chapter 4 (§4.5) how the ‘proletarian’ democracies undermined environmental protection efforts by their close control over the flow of environmental information; that is, by censorship of the press. In his early years, Marx was an outspoken advocate of a free press. In his 1842 *Debates on Freedom of the Press* (1975b, 166), he wrote:

The essence of a free press is the characterful, rational, moral essence of freedom. The character of the censored press is the characterless monster of unfreedom; it is a civilised monster, a perfumed abortion.

Or does it still need to be proved that freedom of the press is in accord with the essence of the press, whereas censorship contradicts it?

A free press was for Marx an important attribute of the 'moral state' (1975a, 120). Censorship, on the other hand, was based on an immoral premise that undermined the moral basis of the state: 'Laws against frame of mind are based on an unprincipled frame of mind, on an immoral, material view of the state. They are an involuntary cry of a bad conscience' (Marx 1975a, 120–1). 'Censorship,' Marx wrote (1975b, 159), 'converts a struggle over principles into a struggle of principle without power against power without principle.'

It is not clear, by the way, whether Engels shared Marx's veneration for a free press; his writings display ambivalence. On the one hand, in *The State of Germany* (1975a, 28–9), written in 1845–6, Engels wrote that 'the liberty of the press is, of itself, a middle-class privilege, because printing requires *money*, and buyers for the printed productions, which buyers must have money again.' But a generation later, in *The Prussian Military Question and the German Workers' Party*, Engels (1975b, 77) expressly recognized that freedom of the press was indispensable for the workers' movement.

Despite Marx's principled defense of freedom of the press, he planted the seeds of the very 'immoral' censorship he deprecated when he called for a proletarian dictatorship. Empirically, censorship has resulted whenever dictatorial rule (whatever its social basis) has been combined with state ownership of the means of production. Moreover, it is not entirely clear that Marx would have opposed any and all uses of censorship by the revolutionary workers' movement. Communist governments frequently justified censorship on the grounds that it was necessary to preserve the proletariat's hold on power; negative press about the 'workers' state' might have fueled counterrevolutionary efforts. It is difficult to see how Marx could have rejected that argument, given what he wrote about the proletariat's legitimate use of coercive state powers to consolidate its gains and prevent counterrevolution.

Regardless of the possible political and ideological justifications, the Communist governments controlled the flow of information through the law and by their ownership of the means of production. In doing so, they displayed the very 'anti-state frame of mind' that Marx had written about and, as he had predicted, their censorship fueled a struggle between principle without power and power without principle. It is the ultimate testimony to the strength of principle that, in the end, power was defeated.

As we saw in Chapter 4 (§4.5), the Communist governments for decades withheld information about environmental conditions in order to avoid troublesome political pressure at home and to score propaganda points in the

Western press. Environmental statistics were, as Ze'ev Wolfson wrote (Komarov [pseud.] 1980, 17), 'the property of the government, just like the earth, the rivers, and the forests and their denizens of animals.' In Poland, beginning in the late 1970s, the press grew more open in its consideration of environmental issues, but information remained privileged. Polish citizens could learn something about environmental problems and how the Party/government was reacting to them, but further investigations usually were blocked (see Jancar 1987, 259, 270). The flow of environmental information was even more restricted in other Soviet bloc countries. In the former Soviet Union itself, as late as 1989, the press complained about limitations on access to information concerning accidents affecting the environment: 'Amongst others, we still cannot find out information about accidents and fires at energy and building installations at the Ministry of Energy of the USSR, about equipment being put out of action when this entails material losses, human victims or even non-catastrophic contamination of the environment' (*Izvestiya*, Apr. 26, 1989, quoted in Z. Medvedev 1990a, 288). The Soviet government to the very end retained firm control over the flow of information.

The 1986 explosion at the Chernobyl nuclear power plant exemplified how, even in the age of *glasnost*, the Soviet press was 'free' to publish only that information the government deemed appropriate. As Zhores Medvedev (1990a, 64) has written, 'the Chernobyl catastrophe . . . was born of secrecy,' and 'many of the mistakes and miscalculations which were made afterwards and which significantly increased the human and economic cost were also the result of secrecy.' The explosion and subsequent meltdown and radiation release at Chernobyl occurred on Saturday, April 26, 1986. The first 'brief' public report of the accident in the Soviet Union was not published until Monday, April 28, and then only because of pressure from the Swedish government, which had detected the accident (from the radioactive cloud hovering over Scandinavia) and established its source (Z. Medvedev 1990a, 56). For ten days following the accident, the Soviets maintained a 'news blackout,' only occasionally releasing terse statements that treated the incident—among the world's worst nuclear accidents and the costliest industrial accident in world history—as 'minor' (Z. Medvedev 1990a, 57, 65, 289). The primary reason for the news blackout was to prevent the domestic population of the Soviet Union from realizing that the socialist government was 'helpless' to prevent the accident and control its effects. The government had not prepared for such a massive nuclear accident because it was supposed to be impossible in the Soviet Union (see G. Medvedev 1991, 101). In the words of one Chernobyl official, 'the accident wasn't in the plan' (quoted in Z. Medvedev 1990a, 52). Throughout the episode, the press was fed a steady diet of misinformation. When accurate reports, based on data collected by American and West European intelligence services, appeared in the Western press, Soviet President Mikhail Gorbachev called them 'an unrestrained anti-Soviet campaign with mountains of lies, most dishonest and malicious lies' (*Pravda*, May 15, 1986, quoted in Z. Medvedev 1990a, 70). This same sentiment appeared virtually

every time some Western news organization reported on environmental problems anywhere in the socialist world.¹²

Almost to the very end of the socialist era in Eastern Europe, unfettered press coverage of environmental issues remained unacceptable because it tended to expose Party/state officials to the informal political accountability that public scrutiny brings. A free environmental press was at odds with the Communist Parties' main goal: maintenance of power.

6.6. Conclusion: From Marxism to Eco-Socialism

Old myths die hard, and that is certainly true of the myth of Marx as an early environmentalist. Marx was not an environmentalist. Some of his ideas directly or indirectly contributed to the failure of environmental protection in People's Poland and throughout the former Soviet bloc. It was not just a matter of misinterpretation, either; at least in some cases, there clearly were problems with Marx's theories. This is most obviously true of his labor theory of value, which, by denying that natural resources have any real economic value (but only use value), directly obstructed efforts to conserve resources and reduce pollution. We should not be surprised, however, that some of Marx's theories turned out to be environmentally harmful. Marx was, after all, a creature of his times. Despite his intention to create a political-economic theory that would witness and explain the end of history, his ideas reflected the period and culture in which he lived (see Raskin and Bernow 1991, 92). As noted in the introduction to this chapter, Marx's ideas had many traits in common with nineteenth-century capitalism, including faith in boundless technological and economic progress and an anthropocentric/utilitarian view of nature. Marx's views and nineteenth-century capitalism were both firmly rooted in Judaeo-Christian worldview (see DeBardeleben 1985, 80).

Over the past century, capitalist economic systems have evolved considerably. Although capitalist economists continue to quote Adam Smith (much as contemporary socialists continue to look to Marx), hardly a 'free' market exists anywhere in the world today. As Karl Popper (1966, 140) wrote in 1945, '*laissez-faire* has disappeared from the face of the earth.' The countries of the industrialized West have long since abandoned the free-wheeling capitalism of the nineteenth century with its Social Darwinist overtones. The market's 'invisible hand' has been sheathed in a thick glove of regulation designed to alleviate at least some of its grosser iniquities. This is true especially in the field of environmental protection, where even the staunchest proponents of free markets, such as Milton Friedman (Friedman and Friedman 1980, 214), have acknowledged a legitimate role for (limited) government intervention and regulation. Capitalism today—what Popper (1966, 335n9) called 'interventionism' or 'democratic interventionism'—bears little resemblance to the capitalism of Marx's time—which Popper referred to as 'unrestrained capitalism.'

There is no reason to expect that Marx's socialist theories would be any more relevant today than nineteenth-century capitalist notions. If anything, we might reasonably expect Marx's ideas to have proved more fragile and, less amenable to alteration and adaptation than capitalism, for his was a jealous, even theological ideology that, unlike capitalism, purported to resolve comprehensively the ills of civilized (European) society. His conception of socialism claimed to be both scientific and historically inevitable. The sheer weight of these claims may have made it more difficult for Marxism to adapt to new political or cultural circumstances.

Marxism has not, however, remained stagnant in the century since Marx's death. His theories have been subject to continual interpretation and reinterpretation as followers have sought answers to questions Marx never considered (as with the continuing quest to enunciate a coherent and internally consistent socialist concept of law), and practice at least occasionally has forced theory to heel (as with the eventual complete repudiation of the labor theory of value). However, contemporary Marxists seem always to be constrained by the need to 'legitimize' their claims by reference to the writings of Marx and Engels. As with the Bible,¹³ many groups with diverse agendas have found something in Marx to cling to—a sentence, a phrase, an implicit theme. As Leszek Kołakowski (1978a, 3) suggests, they all may be entitled to call themselves 'Marxists,' but at some point Marx and Marxism part company.

Ecology is one clear point of divergence. That Marxist theory is fundamentally at odds with environmentalism is a view shared by liberals and many so-called 'eco-socialists,' such as Rudolf Bahro (1982) and Andrew McLaughlin (1990). Eco-socialists reject central tenets of both Marxist socialism and capitalism, calling for a wholly new ideology based not on markets or class conflict but on the needs of the biosphere. They discard fundamental precepts of orthodox Marxism, such as the labor theory of value, the aspiration to material abundance based on ever-increasing levels of technological sophistication, and the historical materialist view of the relationship between people and nature. In so doing they reject, implicitly and sometimes explicitly, the economic, class-based foundations of Marxism (see Routley 1981, 241). Paul Raskin and Stephen Bernow (1991, 90) have written that 'the ecological critique of Marxism is fundamental.'

Marxism stresses conflict within the mode of production—the contradictions between the relations and forces of production and among social classes. Ecology stresses the conflict between the human enterprise and the natural environment. Put starkly (and too simply), the debate is about which set of conflicts should be viewed as more fundamental: class against class or humanity against nature.

From the perspective of social ecology, Raskin and Bernow continue (1991, 90–1), 'Marxism has become obsolete.'

Too narrow in its theoretical framework, too committed to the primacy of class relations, and too imbued with nineteenth-century imagery or progress through the technological domination of nature, conventional Marxism has become irrelevant at best. At worst, it is seen, along with capitalism, as promoting dangerous modes of development around the globe.

What eco-socialists retain of Marxism—social ownership and central planning—rests on an almost entirely new program: to create an ecologically sustainable steady-state society. This program is unapologetically Utopian, and its merits are debatable.¹⁴ Nevertheless, eco-socialist theory has certain significance for an environmental critique of Marxism. Specifically, it shows that Marxist theory is fundamentally incompatible with environmentalism.

Notes

1. This chapter is a revised version of Cole (1993).

2. Engels (1940, 291–2) recognized, at least, that nature is not simply a passive material base for human activities: '[l]et us not, however, be very hopeful about our human conquest over nature. For each such victory, nature manages to take her revenge.' But Engels never developed an ecological theory (see Parsons 1977, 24). He subscribed, with Marx, to the view that human domination of nature was both necessary and natural, going so far as to assert that the struggle against nature constitutes the basis of human thought. Indeed, Engels (1975c, 106) defined 'freedom' in terms of human control over external nature.

3. Parsons is not alone in viewing Marx and Engels as early environmentalists. Donald C. Lee (1980, 3) argues that Marx's theories promote 'a rational, humane, environmentally unalienated social order,' which existing socialist states simply have failed, so far, to implement. Even that pillar of capitalism, the *Wall Street Journal* (Nov. 25, 1991, at 1), has annointed Marx as an early environmentalist.

4. Property-rights scholars who are not legally trained often confuse property categories. Hardin (who is a biologist) referred to 'common' property (*res communes*) when he clearly meant to describe non-property or open access property (*res nullius*). (On the important distinctions between 'common property' and 'open access,' see Bromley 1991, 29.) Hardin's confusion is understandable, however, since 'open access' resources often are referred to as 'common pool' resources or simply as 'commonsens.' In any case, Hardin's terminology does not get in the way of his analysis, which, on my reading, is fairly neutral as between individual ownership and public or social ownership.

5. Hardin's use of the term 'private-enterprisers' may be misleading. Given Hardin's belief in privatization ('or something formally like it') as a solution to the 'tragedy of the commons,' he clearly does not mean to indict economies based on private property. Hardin evidently believes that privatization would stem the destruction of resources by internalizing the costs (as well as the benefits) of use. But he fails to acknowledge that even individually owned property could be exploited to the point of destruction, if time horizons are sufficiently short, discount rates sufficiently high, and substitute investment possibilities sufficiently plentiful (see Clarke 1973a, 1973b). I discuss some normative implications of this analysis in Chapter 8 (§8.4).

6. On Marx's dispute with Malthus, see generally Meek (1953) and Kołakowski (1978a, 413–4).

7. In light of the problems created for environmental protection by Marx's labor theory of value, I argue in Chapter 8 (§8.5) that scarcity pricing is prerequisite of effective environmental protection.

8. Marx's supporters continue to grapple with the problem of reconciling Marx's earlier statements about law with his later dismissal of law as a secondary ideological component of the state, determined by economic relations (see Cain and Hunt 1979).

9. Lenin (1932, 40) and Engels (1958, 514–15) wrote in a similar vein (also see Tay and Kamenka 1985, 231).

10. This concession to bourgeois legality has created a permanent predicament for Marxist legal scholars. If they accept orthodox Marxism's instrumental view of law as an institution for class oppression, then clearly the law can have no place after the Communist revolution abolishes class distinctions and antagonisms. But if they reject the 'withering away' of law as unacceptably Utopian, as Lenin did, then they admit by implication that the law is, in some important respect, autonomous, so that legal institutions cannot be viewed as mere ideological constructs upon the base of economic relations. As a consequence, the entire base and superstructure model of historical materialism falls apart (see Collins 1982, 70). This paradox has 'been among the factors leading to the intellectual disintegration of Marxism as a coherent system of thought' (Tay and Kamenka 1985, 218). Contemporary neo-Marxist scholars, such as Christine Sypnowich (1990), have continued the effort to construct an acceptable and internally consistent theory of socialist law. The fact remains, however, that any theory of socialist law that posits law as an autonomous feature of social relations deviates in important respects from orthodox Marxism. And, after all, the present study is not about what legal theories are possible under Marxism, but about the theories of law that Marx and his most influential colleagues and followers actually held.

11. Kołakowski (1978a, 256) credits Bakhunin with being the first to infer Leninism from Marxism. The implication is that, even if Marx did not imagine socialism as a despotic system, despotism was nonetheless a natural and predictable consequence of revolutionary dictatorship.

12. See the discussion in Chapter 4 (§4.5) of the Polish government's official response to unauthorized publications of environmental information.

13. This biblical allusion is hardly novel (see Toynbee 1946, vol. I, 400). Kołakowski (1992, 13) maintains that the comparison of Marxism to religious faith is 'apt only in part,' because, in his view, Marxism represents more of a 'parody of religion, than a religion proper.'

14. Liberals and neo-Marxists alike have condemned eco-socialist theories as hopelessly Utopian. From a liberal perspective, eco-socialism, like all Utopian schemes, tends toward despotism. I have more to say about this in Chapter 8 (§8.6). Neo-Marxists assert that the eco-socialist goals can be realized only within a Marxist (or, more accurately, neo-Marxist) framework, focusing on the environmentally destructive features of capitalism, such as private property and the profit motive (see Pepper 1993).

Chapter 7

ENVIRONMENTAL PROTECTION IN TRANSITION

7.1. Introduction

When communism collapsed in 1989, Poland's first post-Communist government, led by Prime Minister Tadeusz Mazowiecki, inherited a combined economic and ecological crisis of immense proportions.¹ At the beginning of 1990, it initiated an unprecedented political-economic transformation designed to establish liberal democratic institutions and a market-based economic system. These reforms were generally expected to promote improved environmental protection, for example by hardening budget constraints on polluters.² But there were also fears that free markets might aggravate existing environmental problems and spawn new ones, if the Polish government did not implement a deliberate and forceful policy of environmental protection (see, e.g., Nowicki 1993, 173–5; Żylicz 1993b, 11).

Looking back half a decade later, even the most optimistic proponents of systemic change appear to have underestimated the beneficial effects for environmental protection of Poland's jump to the market. Pollution levels have fallen by more than 40 percent, while Poland's economy has achieved the highest growth rate in all of Europe. By 1994, economists were referring to Poland's economy as 'Europe's tiger' (see, among others, *The Economist*, Apr. 16, 1994; *Australian Financial Review*, Nov. 3, 1993; *Financial Times*, Oct. 6, 1995; *Sunday Times*, June 11, 1995). At the same time, the environmental group Greenpeace dubbed Poland the 'Green Tiger of Europe' (see *PAP News Wire*, Sept. 6, 1995; *The Warsaw Voice*, Oct. 30, 1994).

The purpose of this chapter is to explain how Poland has managed to impress Wall Street and Greenpeace at the same time. It focuses on the dynamic relationship between environmental policies and systemic reforms, such as privatization of the means of production, the development of competitive markets and the establishment of a constitutional *Rechtsstaat* ('law state'). The analysis begins in §7.2 with a brief description of the revolutionary changes that have taken place in Poland since 1989. Section 7.3 then describes the dramatic environmental improvements that have accompanied those changes. In §7.4, I rebut the wide-

spread misperception that those improvements are merely transitory symptoms of economic recession. A review of economic growth, industrial production and environmental protection statistics up to 1994 shows that pollution levels have continued to fall, despite the fact that Poland's economic recession ended in 1992. Environmental policies and systemic reforms combined to reduce pollution emissions and spur resource conservation. To some extent, improvements in environmental policies have been driven by Poland's maturing environmental movement. Section 7.5 examines the growth and influence of that movement. Section 7.6 points to lingering problems for environmental protection in Poland: parts of the country remain highly polluted; Poland's environmental laws and policies still suffer from gaps and weak spots; perhaps most significantly, the current government, which is dominated by former communists and their allies, has shown little interest in environmental protection and has slowed the pace of the systemic reforms that have driven environmental improvements since 1990. Nevertheless, there is reason for optimism about the future of environmental protection in Poland mainly because of the Polish government's desire for inclusion in Western political, financial and security structures, including the European Union. Whether that will spur *sufficient* environmental protection in Poland rather depends on one's subjective determination of what constitutes adequate environmental quality. At least in a democratic Poland, the voters and consumers will have the ultimate say.

7.2. Poland's Political-Economic Transformation

The Death of the Second Republic and Birth of the Third

Poland was the first Communist country to begin transitioning to market democracy. The biggest changes occurred in stages between January 1, 1989 and January 1, 1990. First, in December 1988, the *Sejm* enacted a Law on Economic Activity (1988 Dz. U. No. 41, item 324) that radically altered economic institutions in People's Poland. This marked the final economic reform effort of the Communist era, and it in effect ended the socialist experiment in Poland. When it took effect on January 1, 1989, the new law opened markets by immediately releasing most sectors of the economy from central economic planning and centralized resources allocation. Despite the radical changes it made to Poland's economic institutions, the 1988 Law on Economic Activity has received very little attention from the scholars and journalists who have been following Poland's political-economic transformation. They have focused almost exclusively on the 1990 Balcerowicz Plan of 'shock therapy' economic reforms (named after Leszek Balcerowicz, Vice-Premier and Finance Minister in Poland's first Solidarity-led government). In fact, it was the 1988 Law on Economic Activity that provided the biggest shock. That law, not the Balcerowicz Plan, brought virtual *laissez-faire* to Poland, precipitating hyperinflation, unemployment and economic recession. The

1988 Law on Economic Activity was also responsible for certain environmental problems that mistakenly have been attributed to the Balcerowicz Plan. For example, critics have blamed the Balcerowicz Plan for deregulating hazardous waste imports to Poland (see Manser 1993, 101–2). But that problem clearly was caused by the 1988 Law on Economic Activity, which, in the course of deregulating most economic activities, inadvertently repealed existing regulations on waste imports, including permit requirements and dumping restrictions, thereby opening Poland's borders to hazardous waste shipments. Garbage began flowing into Poland in January 1989, a full year before the Balcerowicz Plan went into effect. To its credit, the *Sejm* quickly recognized and responded to the problem with an amendment to the 1980 Environmental Protection and Development Act (EPDA), closing the borders to hazardous wastes only four months after the 1988 Law on Economic Activity opened them (see Radecki 1992b).³ Before, during and after the introduction of the Balcerowicz Plan in January 1990, the Polish government rigorously enforced that ban. According to reports published by the State Environmental Protection Inspectorate, in 1990 importers attempted to bring 18 million tons of illegal waste into Poland, but only about 60,000 tons actually made it across the border. In 1991, the Polish government reported that out of 3.7 million tons of waste destined for Poland, none made it into the country (Żylicz 1994a, 97). In 1992, Polish border guards intercepted 1,332 improper waste shipments from the West (*Washington Post*, Mar. 23, 1994). These numbers must be taken with a grain of salt, however. Outright bans are never completely enforceable; it is quite likely that some small illegal waste shipments crossed (and still cross) Poland's borders undetected. The important point, however, is that Poland's waste import problems were caused not by the Balcerowicz Plan, but by the Communist Party/state's final efforts to reform the economy.

As Poland's economy faltered in the late 1980s, the Party/state came under increasing pressure to reform Poland's political and governmental structures. Waves of strikes throughout 1988 forced the government into formal negotiations with Solidarity, the independent trade union outlawed since 1981. Those negotiations culminated in April 1989 with the famous 'Round Table' accords, which set the stage for political reforms, including the end of single-party rule in Poland. The accords called for semi-free parliamentary elections, which were held in June 1989. The elections were only 'semi-free' because 65 percent of the seats in the lower house of parliament (the *Sejm*) were reserved for candidates backed by the Communist Party. Nevertheless, the elections were viewed as a referendum on Communist Party rule in Poland, and the results were staggering: Solidarity-backed candidates won every seat open to them in both houses of parliament, except for one in the newly established upper house (the Senate) won by an independent candidate. Even more humiliating for the Party was the failure of many of its unopposed candidates to win election. Election rules under the 'Round Table' accords specified that all candidates, including those running for uncontested seats, had to be elected by a majority of votes cast; Polish voters

defeated unopposed Party candidates simply by crossing out their names on the ballot. The June 1989 elections exposed to the whole world the illegitimacy of Communist rule in Poland.

Two months after the elections, the Party-led government collapsed and the Party itself disintegrated. In September 1989, the first Solidarity-led coalition government took office, and Poland's 'Third Republic' was born. But even after the Communists were vanquished, many of their institutions, including huge and inefficient state-owned enterprises, the 1952 Constitution and the *nomenklatura*, persisted. Much of the real work of political-economic transformation remained to be done. It began in December 1989 with the enactment of the 'December Amendments' to the 1952 Constitution (1989 Dz. U. No. 75, item 444). Those amendments defined the new Polish Republic as a democratic state based on the rule of law (art. 1), repealed article 6, which had based Poland's economic system on the 'socialized means of production,' and amended article 7 to protect and fully guarantee private property rights. As amended, article 7 included a 'takings' provision, modeled on the Fifth Amendment of the United States Constitution; expropriation is permitted 'only for a public purpose and for just compensation' (art. 7).⁴ These amendments provided a (minimal) constitutional foundation for the market economy that emerged in Poland at the beginning of 1990.

Poland's Jump to the Market: The Balcerowicz Plan of Economic Reforms

The enormous political changes of 1989 intoxicated many Poles, anesthetizing them, though only partially and briefly, to the painful economic situation in which they lived. When the first Solidarity-led government of Prime Minister Tadeusz Mazowiecki came to power, Poland's economy was in dire straits (see Cole 1991, 217–19). Gross national product, which had fallen by 1.6 percent in 1988, was falling even faster in 1989; by 1990, the annual rate of decline was expected to reach 3 percent (United States Central Intelligence Agency 1990, table 1). National income did not come close to matching expenditures, so that by 1989 the deficit amounted to 30 percent of Poland's total budget (see *New York Times*, Oct. 23, 1989). Poland's budget deficit was largely due to foreign debt burdens—by 1989, Poland owed foreign governments and international banks US\$40 billion, making it the world's fourth-largest debtor nation (see Portes 1981, 4–10; *New York Times*, Apr. 23, 1989). But the main causes of deficit were government price supports and subsidies to inefficient industries. To cover those expenditures, the government printed worthless money, sparking hyperinflation. Up to the end of 1989, the prices of basic commodities rose by 'more than 50 percent per month, and in some cases by several hundred percent' (see *New York Times*, Sept. 12, 1989). In July 1989, aggregate costs increased by 10 percent over the preceding month and by 85 percent over the first seven

months of 1988; food deliveries were down 20 percent from the previous year; industrial deliveries fell by an average of 11 percent from 1988; and total available housing, already in short supply,⁵ fell by 5 percent (*Financial Times*, Aug. 30, 1989). Producers routinely withheld commodities from market, anticipating further price increases from hyperinflation, which also continually devalued the wages of working Poles. Annual disposable income, which had been declining throughout the 1980s, fell below US\$100 in 1989 (United States Central Intelligence Agency 1990, table C-14). Government price controls did not help at all, merely making more affordable on paper what did not exist on store shelves. According to a report prepared for the US House of Representatives (United States House of Representatives, House Committee on Small Business 1989, 8) in 1989, 60 percent of Polish wage earners could not make ends meet. As 1989 ended (just before the Balcerowicz Plan took effect), inflation in Poland reached an astronomical annualized rate of 3,200 percent (Hajduk 1994, 72n13).⁶ Poland's economic crisis did not afford the Mazowiecki government the luxury of time in developing a strategy to transform the political-economic system. Immediate action was required to stem hyperinflation, stabilize the currency and curtail shortages of food and other necessities. As a first move, in October 1989 the National Bank of Poland devalued the zloty by 15 percent against the US dollar. Two months later, on December 17, 1989, then-Vice-Premier Leszek Balcerowicz introduced his 'shock therapy' program to a parliament still dominated by former members of the defunct Communist Party.

The Balcerowicz Plan was designed, first and foremost, to curtail runaway inflation and convert the Polish economy to a market base. It sought to accomplish this by immediately slashing all state subsidies by one-half, decontrolling prices for most consumer goods, limiting wage increases to reduce inflationary pressures, and reducing government inflation compensation from 100 to 80 percent. The program also sought to establish a fully convertible currency, and included provisions, not immediately implemented, for restructuring industries and privatizing state-owned enterprises.

This is not the place for a detailed assessment Poland's so-called 'shock therapy' program, but it is worth clarifying some widespread misconceptions. First, contrary to what some critics have written (such as Manser 1993, 12, 41-2, 151), the Balcerowicz Plan was intended to institute not a *laissez-faire* economy in Poland, but a modern welfare state complete with social security, state financed unemployment compensation and environmental regulations. The Balcerowicz Plan did not end state subsidies; it merely cut them in half; it did not end government inflation compensation for pensioners and wage earners, but merely reduced the level of compensation by 20 percent. These changes, although vitally important for curbing hyperinflation, only marginally reduced the Polish government's social commitments. In fact, between 1989 and 1992 (i.e., during the initial implementation period of the Balcerowicz Plan), state spending on social security actually doubled as a percentage of GDP to 18 percent (see *Polish News Bulletin*,

Aug. 10, 1993), and environmental investments nearly doubled (see Table 7.7 on p. 198). These are hardly the trends one would expect to see from a government intent on establishing *laissez-faire*.

The Balcerowicz Plan did not magically cure Poland's economic problems, but no one really expected that it would. As Balcerowicz himself admitted in an April 1990 interview, '[r]ecovery cannot occur quickly. It is a process. It is important that it should begin' (quoted in *Gazeta International*, Apr. 26, 1990). At the outset, his austerity program made life even more difficult for most Poles. In the first 24 hours after the Balcerowicz Plan was launched on January 1, 1990, the price of coal rose 600 percent, electricity costs quadrupled, the price of gasoline doubled, food prices skyrocketed, and even the price of a simple bus ticket rose by 250 percent (see *New York Times*, Jan. 8, 1990, Jan. 2, 1990). By the end of 1990, Poland's GNP had declined (on paper) by 12 percent and industrial production had fallen by 24 percent (see Table 7.1). But these depressing statistics must be taken with several grains of salt. For one thing, according to Andrew Berg (1994, 398–9) of the International Monetary Fund, Poland's *actual* GDP decline in 1990 probably was closer to 5 percent than the official estimate of 12 percent because:

the entire statistical and information-collecting apparatus of the state was geared towards measuring physical output in large state enterprises, exclusively by obtaining information from every enterprise as an adjunct to the planning apparatus. With liberalization, information-collecting agencies were overwhelmed and, at least initially, were unable to measure the growth in output from the hundreds of thousands of new small private firms, especially given the new interest in tax evasion.

But even if analysts had been better able to track the growth in output, comparisons of post-Balcerowicz Plan economic performance with pre-Balcerowicz Plan economic performance still would be inherently problematic. The market-clearing prices instituted by the Balcerowicz Plan simply are not comparable with the 'fictitious prices' established arbitrarily by economic planners before 1990. As Waław Wilczyński (*Polish News Bulletin*, June 22, 1993) has written, 'it is groundless to treat 1989 prices as a suitable reference for surveying changes in the economy.' It makes better sense to look at levels of consumption and savings. Between 1989 and 1992, real savings doubled and consumer sales in Poland rose 5.8 percent after adjusting for inflation. In addition, the number of cars on Polish roads increased dramatically, and the sale of gasoline remained constant despite steeply rising prices. By 1992, there were more television sets per capita in Poland than in Italy, Portugal, Ireland or Greece. And by 1993, the number of inhabitants per Warsaw apartment had fallen to half of what it had been in the late 1980s. Thus, according to Wilczyński, '[n]othing corroborates a thesis on the recent across-the-board pauperization of society' under the Balcerowicz Plan.

Other supposed consequences of that plan, such as inflation and unemployment, were largely inheritances from the previous system. According to Zbigniew Fallenbuchl (1993, 14), the rampant inflation that accompanied ‘shock-therapy’ reforms at the beginning of 1990 was ‘a corrective increase,’ the conversion of a hidden into an open inflation. Communist governments had hidden inflation through the use of price controls, which, as already mentioned, kept prices low but precipitated constant supply shortages. It was not uncommon for consumers to spend long hours in line waiting for goods that were only *rumored* to be available. By freeing prices, the Balcerowicz Plan exposed this hidden inflation. ‘It eliminated shortages and other market distortions, and helped to adjust demand to the existing limited supply.’ Similarly, according to Fallenbuchl (1993, 14, quoting Janusz Beksiak), the initial rise in unemployment, which reached 6 percent at the end of 1990 (16 percent at the end of 1994), was not *caused* by the reforms; it was ‘an inheritance from the old system, not a pathology of the new one.’⁷ Unemployment officially never existed in People’s Poland; according to the logic of socialist legality, it could not exist because it was unconstitutional. But, in fact, unemployment *did* exist in the form of *overemployment*—several employees were assigned a task that could have been done by just one. Socialism’s hidden unemployment also was reflected in low rates of labor productivity. As Polish workers used to say, *You pretend to pay us, and we pretend to work*.

Whether the Balcerowicz reforms *caused* or merely *exposed* Poland’s economic recession of 1990–92, the suffering experienced by many Poles during the initial months of transition was very real. Nevertheless, the relationship between economic reforms and their consequences is more complex than many observers have acknowledged. They cannot be adequately treated outside their systemic and historic contexts. Specifically, the Balcerowicz Plan must be assessed in light of the preexisting problems of socialism. The same is true, as we shall see later, of the impact of political and economic reforms on environmental protection.

The Balcerowicz Plan managed to achieve all of its primary objectives with surprising speed. Shortages of food and other goods vanished in a matter of days. The word ‘hyperinflation’ was not seen or heard after February 1990. By May, the inflation rate stood at only 4 percent (*New York Times*, June 7, 1990).⁸ Just as quickly the zloty had become fully convertible on the internal market, and throughout 1990 it held its own against the American dollar (*New York Times*, July 14, 1990). Perhaps most importantly for present purposes, the Balcerowicz Plan substantially hardened budget constraints throughout most sectors of the Polish economy. One common method for measuring the hardness of the budget constraint is to correlate pre-tax and pre-subsidy business profits with post-tax and post-subsidy profits. As we saw in Chapter 5, under socialism the industries with the lowest pre-tax profits (or highest losses)—usually coal mining and food production—often ended up with the highest ‘profits’ after tax subsidies. The Balcerowicz Plan ended this practice. Between 1989 and 1991, the correlation between pre- and post-tax profits for a sample of 1899 large

industrial enterprises ‘rose dramatically and significantly’ from .38 to .71 (Berg 1994, 393).

The Balcerowicz Plan was the decisive first step in Poland’s ongoing efforts to construct a modern market democracy. Since 1990, economic policies have ebbed and flowed with political and social tides, but progress has remained remarkably steady. Poland’s economy started to grow in 1992, and since then growth has increased each year. In 1993 and 1994, Poland’s economic growth rate was among Europe’s highest; in 1995, it reached 7 percent; and economists predicted that economic growth would average 4.9 percent for the last five years of the century (see *Polish News Bulletin*, Feb. 16, 1996; *EIU Country Forecasts*, Sept. 6, 1995). Meanwhile, consumers who used to line up for hours, waiting for whatever goods were available, suddenly had choices of producers, brands, stores and quality. And although large-scale privatization of Poland’s state-owned enterprises has proceeded at a snail’s pace, the *privatization-from-below* of small-scale industrial, commercial and retail businesses has driven economic growth in Poland. By 1995, private firms were contributing 56 percent of Poland’s gross national product; they produced 38 percent of industrial output and accounted for 60 percent of national employment (*Polish News Bulletin*, Mar. 7, 1995).

All this is not to say that Poland’s political-economic transformation is complete. A good deal of restructuring remains to be done. Thousands of state-owned enterprises still await privatization; Poland’s banking and financial institutions require intensive reorganization and modernization; Poland’s tax system is unstable; various industrial sectors, such as mining, require fundamental restructuring simply to survive in competitive world markets; and the legal framework for a market economy remains underdeveloped. Poland’s economy *circa* 1996 still is best described as a transitional market economy (see Fallenbuchl 1993).

7.3. Systemic Transformation, Economic Recession and Environmental Protection in Post-Communist Poland

Whereas much has been written since 1989 about political-economic reforms throughout Central and Eastern Europe (e.g., Slay 1994; Sachs 1993; Rychard 1993; S. Gomulka 1994; Clague and Rauser 1992), accounts of post-Communist environmental restoration and protection efforts have been scarce and generally inadequate. In 1993, Roger Manser (1993, 15, 17) wrote of the ‘failure’ of environmental protection in post-communist Central and Eastern Europe: ‘In spite of curbing some of the excesses of communism’s pollution economy, the nascent market economy has so far failed to bring fundamental improvements and in the future is likely to reinforce old threats as well as create new ones.’ A *New York Times* reporter similarly concluded, in a 1994 article, that ‘[t]he onset of capitalism has not cleaned the region’s foul air, soil or water. . . . What’s more, capitalism is bringing its own problems—more traffic pollution, less public transportation,

more plastic foam, more clashes between environmentalists and the peddlers of consumerism' (*New York Times*, Nov. 3, 1994). Similar stories appeared in the Polish press. The August 1994 issue of the Polish weekly *Wprost* carried an alarming cover story, entitled 'Death in the Air,' about the growing problem of air pollution. The article's author never bothered to mention that air pollution emissions in Poland declined by more than 40 percent between 1990 and 1994 (see Table 7.1). But, of course, good news does not sell magazines.

More difficult to understand is why the same misperceptions have infected the academic literature. For instance, Joan DeBardeleben (1995, 3–4), a noted scholar of environmental protection in Central and Eastern Europe, recently concluded that environmental problems now 'pose even greater hazards than earlier' for a whole host of reasons: resources for combatting pollution are scarcer; international cooperation among former socialist allies has been replaced by economic and 'environmental competition and conflict'; and 'regulatory mechanisms have deteriorated, rather than improved.' In addition, '[p]ervasive corruption, resource shortages, and technological decline make even previously-existing structures for pollution control less effective.' Meanwhile, environmental concerns are 'low on the scale of priorities' because of immediate economic problems. Like other analysts who share her pessimistic view of post-Communist environmental protection in Central and Eastern Europe, DeBardeleben explains away inconvenient facts about dramatic pollution reductions as mere transitory symptoms of economic recession. Another noted expert on environmental protection in Central and Eastern Europe, Barbara Jancar-Webster (1995, 59), argues in a similar vein:

In the opinion of environmental professionals, governments do not consider the environment a first priority. With an apathetic public, there is no popular domestic force pushing legislatures or executives to take action, and there is little money to carry out improvements. All predictions foresee a worsening of environmental conditions in the 1990s before the economic situation will have sufficiently improved so that governments can turn to the environment.

But the facts do not support these gloomy assessments and predictions,⁹ at least not in Poland's case.

Since 1990, environmental conditions in Poland have improved significantly, and not solely or predominantly as a result of economic recession. Deliberate environmental policies have made a major contribution to pollution reductions and increased conservation. And those policies have been facilitated by systemic reforms, most notably the institution of the rule of law and the imposition of substantially hard budget constraints throughout the economy. The significant environmental improvements resulting from this combination of improved environmental policies and systemic reforms are structural; they have not been reversed by Poland's return to economic growth.

Table 7.1. Percentage change in GDP, industrial production and air pollution emissions in Poland, 1990–5

	<i>GDP</i>	<i>Industrial production</i>	<i>Dust</i>	<i>Carbon oxides</i>	<i>Nitrogen oxides</i>	<i>Sulphur dioxide</i>
1990	–12	–24	–23	–17	–18	–21
1991	–7	–12	–21	–28	–6	–8
1992	2	4	–26	–15	–8	–10
1993	4	7	–13	–21	0	–3
1994	5	13	–12	0	0	–3
1995	7	9	–18	–12	1	–5

Note: Figures are rounded to the nearest point.

Sources: GDP and industrial production figures, 1990–1993—Bossak (1994, 34, table 3; 53, figure 1); *Polish News Bulletin*, Jan. 23, 1995 and Feb. 16, 1996. Pollution emissions—GUS (1997, 1996, 23, table 1; 1995, 23, table 1; 1991, 123, table 4.1).

Evidence of Structural Environmental Improvements in Poland

Pollution levels in Poland declined dramatically after the introduction of the Balcerowicz Plan in January 1990. Table 7.1 highlights Poland's annual rates of economic growth and pollution emissions from 1990 to 1995 (the last year for which environmental statistics are available). By 1994, aggregate industrial pollution had fallen by 40 percent (*PAP News Wire*, June 5, 1994). As already noted, some analysts (including Jendrońska and Sommer 1994, 187; DeBardeleben 1995b, 4) viewed these pollution reductions merely as by-products of Poland's economic recession. Roger Manser (1993, 75) predicted that a return to economic growth would quickly reverse the emissions declines. But other analysts rightly maintained that the recession was only one factor, and maybe not even the most important one. Poland's preeminent environmental economist, Tomasz Żylicz (1994d, 81n3), pointed out that the pollution reductions had to be 'due to economic restructuring, and improved enforcement' because they exceeded 'what could be explained in terms of GDP decline.' The journalist Eugeniusz Pudlis wrote (in *The Warsaw Voice*, Oct. 3, 1993) that the Polish government's 'deliberate' environmental policies deserved *more* credit than the recession for lower pollution levels. And in a May 1994 interview, Poland's Chief Environmental Protection Inspector, Andrzej Walewski, declared that data collected by the Inspectorate 'prove' that pollution reductions have resulted from 'investment in environmental protection, and improved discipline among ecological installation users' (quoted in *The Warsaw Voice*, May 1, 1994).

Data provided in Table 7.1 show that Poland's economic recession ended in 1992, when gross national product increased by approximately 2 percent, and industrial output was 4 percent higher than the previous year. In 1993, the economy grew by 4 percent (the highest economic growth rate in all of Europe) and industrial output rose by 7 percent. Since then, Poland's economy has continued to grow at an average annual rate of 6 percent, and industrial production has increased each year by an average of 11 percent.

This impressive economic recovery made it possible finally to test the alleged connection between the recession and lower pollution levels. Had the recession been the sole or even the predominant cause of reduced emissions, as many have claimed, we logically would have expected to see pollution emissions increasing along with production levels beginning in 1992. But that has not happened. In 1992, emissions of major air pollutants declined by an average of nearly 15 percent from 1991 levels (despite the 4 percent hike in production). Interestingly, that was the same percentage emissions reduction Poland experienced in 1991 (from 1990 levels), when the economy was still shrinking (by 7 percent). Between 1992 and 1995, as Poland's economy grew by 18 percent and industrial production increased by 35 percent, emissions of major air pollutants fell by an average of 9.1 percent. As air pollution emissions have fallen, so have water pollution discharges in Poland. During the recession in 1990 and 1991, discharges fell by 14 percent (from 1989 levels); when Poland's economy started growing again in 1992 and 1993, water pollution continued to decline by 8 percent (from 1991 levels) (GUS 1991, 25, table 1; 1995, 22, table 1). And the rate of resource consumption has fallen along with the pollution levels. In 1993, industry and consumers used 2.4 percent less water than in 1992, 19.5 percent less than in 1989 (*Business News from Poland*, Sept. 30, 1994). Meanwhile, according to Tomasz Żylicz (1994a, 99), '1990 was the first year after the World War II that harvests in Polish forests were down-sized to the sustainable level.'

These statistics belie the contention that pollution reductions were solely or predominantly tied to Poland's economic recession. Other factors, most notably Poland's deliberate environmental policies, have contributed substantially to environmental improvements since 1989. And those policies have been facilitated by various systemic reforms.

7.4. Environmental Policies, Systemic Reforms and Pollution Reductions

The 'Round Table' Environmental Protocol

The history of post-Communist environmental law and policy in Poland actually began before the Communists gave up power. The 'Round Table' accords, signed in April 1989 by the Jaruzelski regime and the Solidarity opposition, included an

important environmental *protokol*, which called for the appointment of a special commission of legal experts to overhaul Poland's failed system of environmental regulation by the end of 1990. The protocol specified six provisions to be included in new comprehensive environmental legislation: (1) freedom of access to environmental information; (2) the right freely to conduct and publish environmental research; (3) the right to sue to protect the environment; (4) the establishment, in each community, of a freely elected environmental ombudsman authorized to inspect and collect information from local government agencies and polluting enterprises; (5) annual publication of reports on the state of the environment; and (6) exclusion of all environmental information from the state secret laws (*Protokol Podzespołu d/s Ekologii Okrągłego Stołu* 1989). Most of the specific mandates of the environmental protocol have yet to be instituted by statutes or regulations. Nevertheless, the mere inclusion of environmental issues in the historic 'Round Table' negotiations was an important step toward environmental law and policy reform in Poland.

A New Environmental Policy for a New Government

When Solidarity took over from the Communists in September 1989, Tadeusz Mazowiecki, in his first public statement as prime minister, discussed the need to transform environmental protection along with the political-economic system (*Gazeta Wyborcza*, Sept. 14, 1989). As his government prepared to launch the Balcerowicz Plan of economic reforms, it also began working on administrative and legislative reforms for environmental protection. Before the end of 1989, all environmental and nature protection responsibilities were consolidated within a single new ministry, the Ministry of Environmental Protection, Natural Resources and Forestry (1989 Dz. U. No. 73, item 433), which set about developing a national policy to restore and protect Poland's environment into the twenty-first century. Its new National Environmental Policy (NEP) was published a year later (November 1990), and received parliamentary approval in May 1991 (*Ministry of Environmental Protection, Natural Resources and Forestry* 1991). The NEP was based on fundamental principles of environmental protection, including 'sustainable development' and 'the polluter pays principle.' It established short-term (3–4-year), mid-term (3–10-year) and long-term (25–30-year) goals to be achieved through a combination of market mechanisms and administrative regulations. The immediate short-term goal was to eliminate environmental hazards posing imminent threats to human health. Over the mid-term, the NEP sought to reverse declining environmental trends by ratcheting-up Polish environmental standards to Western levels. This goal was designed, in part, to satisfy a critical precondition for Poland's eventual membership in the European Union. The NEP's long-term goal was to implement sustainable development practices throughout the Polish economy.

An Old Law in the New System

While the Environment Ministry was busy preparing its new National Environmental Policy, the Mazowiecki government appointed an independent Environmental Law Reform Task Force, as called for in the environmental protocol to the 1989 'Round Table' accords, to prepare comprehensive new environmental legislation. The Task Force prepared several drafts of an 'omnibus' environmental law, but none of them proved to be satisfactory. Eventually, the Task Force concluded that the goal of completely reformulating Poland's system of environmental law was overly ambitious and perhaps unnecessary; existing laws could be improved sufficiently by amendment, rather than replacement (see Jendrońska 1992, 534). Consequently, Poland's 1980 Environmental Protection and Development Act (EPDA) has survived the transition structurally intact, though it has been amended seven times (so far) since 1989 (1989 Dz. U. No. 26, item 139; 1989 Dz. U. No. 35, item 192; 1990 Dz. U. No. 34, item 198; 1990 Dz. U. No. 39, item 222; 1991 Dz. U. No. 77, item 335; 1991 Dz. U. No. 101, item 444; 1993 Dz. U. No. 40, item 183). The most important of these amendments banned hazardous waste imports,¹⁰ strengthened Poland's environmental impact assessment procedures for new economic developments, and established an innovative new Environmental Protection Bank (*Bank Ochrony Środowiska*) to provide low-interest loans for environmental protection projects. Some analysts (e.g., Jendrońska 1990, 21) have criticized these 'piecemeal' reforms, claiming that the EPDA, as a relic of the old system, should be completely replaced by legislation better adapted to the new political-economic climate. It is certainly true that the 1980 law remains deficient in several respects (some of which are described in Cole 1995a, 338–41), and replacement legislation is in the works.¹¹ But in some respects the old law is actually better suited to the new system than it was to the old.

As we saw in Chapter 2, Poland's 1980 statute was among the world's earliest environmental laws to rely primarily on market mechanisms—resource-use and pollution fees—for environmental protection (1980 Dz. U. No. 3, item 6, parts V and VII).¹² Its various regulatory standards, fees for resource use and pollution emissions, and non-compliance fines are today among the world's highest and most extensive (see Summers 1994). The EPDA mandates charges for just about every major economic activity that uses or pollutes any environmental medium, including air pollution emissions, water use and pollution discharges, timber harvesting, waste storage and disposal, use of agricultural lands for non-agricultural purposes, and use of automobiles in areas under special environmental protection, such as National Parks (1980 Dz. U. No. 3, item 6, art. 86). In Chapter 3 (§3.3), I mentioned that Poland's broad application of pollution and resource-use fees substantially predated the move toward economic means of environmental protection throughout the rest of the industrialized world. It was a truly progressive approach to environmental protection, or would have been but for the fact that market mechanisms require markets to be effective. As we saw in Chapter 5,

the Polish Communists were trying to stimulate pollution control and conservation with prices in an economic system where prices were essentially meaningless because resources and rewards were allocated according to production levels rather than profit, competitive markets virtually were non-existent, and polluters were insulated from price stimulation by endemic soft budget constraints stemming from the Party/state's regulatory conflict of interest. Using prices to control pollution in Poland's socialist economy was something like using water to control an electrical fire.

Poland's systemic transformation to an economy based on private property and free markets, while still incomplete, has already substantially ameliorated this problem. The government's regulatory conflict of interest has been reduced. As previously noted, in 1995 private firms contributed 56 percent of Poland's gross national product, produced 38 percent of industrial output and accounted for 60 percent of national employment (*Polish News Bulletin*, Mar. 7, 1995). Budget constraints throughout this growing private economy are substantially hard. Private firms in post-Communist Poland operate in competitive markets, where performance determines survival. They naturally are inclined to limit the costs arising from inefficient production as well as regulatory costs. Under the circumstances, pollution charges can be expected to induce changes in production and pollution patterns, assuming fees are set at levels that alter firms' marginal cost calculus. In Poland's case at least, that assumption is warranted. According to a recent study, emissions charges for dusts and effluent charges for sewage in nine industrial sectors of the Polish economy now approximate or exceed average abatement costs (Poskrobko and Cygler 1993, 200–1).¹³ As Tables 7.2 and 7.3 disclose, it is now cheaper for firms in those sectors to reduce pollution emissions than to pay the fines.¹⁴ And in a policy that proves Poland's environmental charges are *not* intended simply as a source of revenues for the government, environmental penalties may be suspended for polluters who pledge to invest in environmental protection equipment or process changes within five years. If they keep their pledge, the penalty is extinguished; if not, the penalty is doubled (see *Rzeczpospolita*, Feb. 17, 1995).

Regulated firms in Poland increasingly are finding that environmental investments can pay dividends. For example, a pharmaceutical plant near Warsaw recently invested 60 million (old) zlotys to reduce its ammonia use by more than half; this one process change increased annual net profits by about 300 million (old) zlotys (*The Warsaw Voice*, Jan. 8, 1995).¹⁵ A coke-chemical complex near Zabrze implemented a change in its coking gas process at a cost of 3.5 billion (old) zlotys; this investment is expected to pay for itself in energy savings over 10 years (*The Warsaw Voice*, Jan. 8, 1995). And engineers from the Electro-Mechanical Factory in Leszno designed a method for reducing waste by-products from chromate treatment; the new method costs 36.5 million (old) zlotys to implement, but its pay-back period is only 2.1 months (*The Warsaw Voice*, Jan. 8, 1995). It is worth stressing that these are voluntary process changes designed to improve profitability

Table 7.2. General structure of expenses for environmental protection in nine sectors of the Polish economy, 1990 and 1991 (%)

<i>Type of cost</i>	<i>1990</i>	<i>1991</i>
Abatement costs ^a	62.2	38.7
Ecological charges ^b	37.8	61.3

a. Includes all environmental protection costs not associated with pollution charges, including the costs of installing, running and maintaining pollution control equipment.

b. Including environmental fees and fines under the 1980 EPDA, as amended.

Source: Poskrobko and Cygler (1993, 200, table 1).

Table 7.3. Percentage cost increases for environmental protection in nine Polish industries from 1990 (mean values) to the first term of 1991

<i>Industry</i>	<i>Abatement costs^a</i>	<i>Ecological charges</i>	<i>Remaining environmental protection costs</i>	<i>Total costs of environmental protection</i>
Fuels–mining	152.0	612.0	207.6	342.4
Power	160.7	942.8	633.3	516.8
Metallurgy	140.5	453.8	151.1	258.5
Electrical–metal	171.4	329.0	157.0	215.5
Chemical	199.6	331.0	236.0	275.4
Mineral	169.6	405.9	165.3	223.6
Wood–paper	196.8	420.5	177.3	315.9
Light industry	167.4	428.0	180.4	332.7
Food processing	142.0	268.8	100.0	243.4

a. Includes all costs associated with reducing pollution emissions.

Source: Poskrobko and Cygler (1993, 201, table 2).

by, among other means, reducing production costs and exposure to environmental liability; they were not mandated by the State Environmental Protection Inspectorate or any other government agency. Most importantly, they indicate that price stimuli (under the 1980 EDPA) are internalizing production costs in Poland's new market economy by inducing firms to alter their production habits voluntarily.

The same phenomenon has been observed to a more limited extent in agriculture. Although that sector enjoys softer budget constraints than the rest of Poland's private economy, many agricultural subsidies have been slashed or abolished. For instance, the Polish government no longer underwrites fertilizer and pesticide

Table 7.4. Pollution intensity of electricity generation in Poland, 1989–91 (tons/GWh)

<i>Air pollutant</i>	<i>1989</i>	<i>1990</i>	<i>1991</i>
SO ₂	15.1	12.6	12.0
NOx	3.5	3.0	3.2
Dusts	5.5	4.6	3.8

Source: Fiedor et al. (1993, 94, table 15).

use (see Brocka-Palacz 1994, 58). As a result, between 1988 and 1993, farmers reduced their (over)use of general (NPK) and calcium-based inorganic fertilizers by 63 and 32 percent, respectively; pesticide use fell by 66 percent (calculated from GUS 1995, 54, tables 18 and 19; 1990, 14, tables 17 and 18). This entails obvious benefits for the environment (especially surface water quality) and public health, so long as it does not result in food shortages.¹⁶

As we might predict, budget constraints remain softer for enterprises still owned by the state, but they are harder than they used to be. State-owned enterprises that used to avoid environmental fees and fines with ease are now being forced to pay up. From 1990 to 1991, government revenues from pollution and resource-use charges increased by a factor of 13 (Manser 1993, 117). By 1993, Poland's various environmental funds were 'annually collecting and spending 15–20 times more in real terms than in 1990' (Wajda 1993, 19; but see *PAP News Wire*, Apr. 7, 1994). As a consequence, even the largest, most heavily subsidized state-owned enterprises have become relatively cost conscious (at least as compared with the 1980s). Consider, for example, Poland's energy industry. In a recent World Bank-sponsored study of the effects of environmental charges on that industry (Czaja et al. 1994, 47), economists from the Oskar Lange Academy of Economics in Wrocław found that increased fees have 'caused' pollution reductions *and* increased conservation efforts. The data provided in Table 7.4 show that between 1989 and 1991, Polish power plants significantly reduced the pollution intensity of their activities, reducing per unit emissions by 20 percent on average. These improvements cannot be explained by economic recession because they are not tied to production levels. Rather, the researchers concluded that the reductions were due to the heightened cost consciousness of power plant managers resulting from increased emissions charges, higher per unit energy costs, and hardened budget constraints.

So, as Stanisław Wajda and Jerzy Sommer (1994, 190) have concluded, Poland's environmental fees and fines have finally become 'what they should be—a heavy burden for polluters.' Further proof of this comes from the political battle that took place in 1992, when the Polish government announced dramatic fee increases for air pollution emissions (1991 Dz. U. No. 125, item 558) (those

Table 7.5. Changes in emissions fees for selected air pollutants (zlotys/kg^a and approximate US\$ values)

<i>Date of imposition</i>	<i>Lead</i>	<i>Sulphur dioxide</i>	<i>Benzene</i>	<i>Fluorine</i>
Jan. 1, 1991	36,000 (\$3.79)	680 (\$0.07)	1,800 (\$0.19)	3,600 (\$0.38)
Jan. 1, 1992	500,000 (\$38.46)	1,100 (\$0.08)	1,000,000 (\$76.92)	3,000 (\$0.23)
Oct. 1992 (retroactive to Jan. 1, 1992)	50,000 (\$3.85)	770 (\$0.05)	100,000 (\$7.69)	2,100 (\$0.16)
Jan. 1, 1993	500,000 (\$31.25)	1,100 (\$0.07)	1,000,000 (\$62.50)	3,000 (\$0.19)

a. Prices are denominated in old zlotys.

Source: Manser (1993, 94, table 5.6).

changes are shown in Table 7.5). Affected enterprises—mostly state-owned dinosaurs—exerted their residual political muscle to roll back the charges, and in late 1992 the government caved in to their demands, slashing pollution fees by up to 90 percent (1992 Dz. U. No. 79, item 400; also see *Polish News Bulletin*, Nov. 19, 1992). Fortunately that was not the end of the story. Polish environmentalists predictably were outraged. Their protests were joined by private firms and, most surprisingly, a few state-owned enterprises (such as the Jaworzno III power plant) that had already invested heavily in environmental improvements—the fee reductions greatly devalued their investments while rewarding enterprises that had done nothing to reduce pollution (see Zechenter 1993, 121). Together, this collection of strange bedfellows persuaded the government to reverse its decision and reinstate the higher fees (as shown in Table 7.5) (1993 Dz. U. No. 9, item 44; also see *Polish News Bulletin*, Jan. 27, 1993; *Reuter Textline/Rzeczpospolita*, Feb. 1, 1993). The fact that this fight took place at all, let alone its outcome (with the environmental side prevailing), indicates how much budget constraints have hardened since 1989, at least for many economic actors. And those hardened budget constraints have, among other benefits, splintered previously unified industrial interests.

Besides higher fees, polluters are also subject to higher fines for violating environmental standards. The data in Table 7.6 show that between 1990 and 1993, the collection of non-compliance fines in Poland increased by a factor of 12, despite an equally dramatic decline in the ratio of collected to assessed penalties during the same period. The majority of uncollected fines are owed by the financially strapped (state-owned) mining sector which in 1991 alone racked up environmental penalties amounting to 4 trillion zlotys (approximately US\$300 million) (see *PAP News Wire*, Apr. 7, 1994; *Polish News Bulletin*, June 14, 1993).

Table 7.6. Environmental fines, 1990–3

	<i>Collected fines (billion zlotys)</i>	<i>Percentage of assessed but uncollected fines</i>
1990	17.9	32
1991	95.0	59
1992	140.7	78
1993	215.4	84

Source: GUS (1995, 379, table 21).

The Ministry of Industry, under pressure from mining concerns, attempted to have the charges rescinded, but the Ministry of Environmental Protection refused (*Polish News Bulletin*, June 14, 1993). The charges have become debts owed by the mines to the Polish government. However, a current plan for restructuring the mining industry calls for a substantial reduction in accumulated debts, including unpaid environmental charges (*Polish News Bulletin*, Apr. 4, 1995). This reflects the continuing impetus to soften budget constraints for state-owned enterprises. But the mining industry's compliance problems also reflect a legitimate policy dilemma. Regardless of the level of environmental charges, polluters can be expected to improve their environmental performance only if they possess sufficient capital to invest in pollution-control equipment or process changes. Poland's mining industry apparently lacks the capital either to abate emissions or to pay environmental charges. Under the circumstances, the state has only three options: (1) close down the industry, (2) soften its budget constraints (i.e., forgive the environmental fees and fines) so that the industry can continue operating at existing (unlawful) pollution levels, or (3) subsidize environmental improvements at the mines. The first option is unthinkable, and the second just barely thinkable. Only the third option seems a realistic alternative.

Environmental Liability and Privatization: Work in Progress

While hardened budget constraints throughout most of Poland's economy have facilitated improved environmental protection, privatization of Poland's mammoth, pollution-belching state enterprises has proceeded at a snail's pace, plagued by financial scandals and political/ideological debates over the state's proper role in the economy. As of December 1994, only 36 percent of the more than 8,000 state-owned enterprises in Poland had been privatized or were in the process of privatization (see United States General Accounting Office 1995, 46–59).¹⁷ Paradoxically, many 'privatized' firms in Poland are not privately owned. One privatization track in Poland is called 'commercialization.' Commercialized enterprises

are subject, like private companies, to Poland's Commercial Code, but they remain wholly owned by the State Treasury. In other words, enterprises privatized on the commercialization track are really not privatized at all (see *Polish News Bulletin*, Aug. 26, 1994). More than 500 state-owned enterprises have been subject to this form of *ersatz* privatization. It is the preferred approach of the current Polish government, which is comprised of former Communist Party members and their Peasant Party allies. A large-scale Mass Privatization Program, which was initially planned in 1991, did not get off the ground until the middle of 1995; and even after its implementation some 5,000 enterprises remain owned by the state (see *Polish News Bulletin*, Aug. 26, 1994).

Environmental issues arise frequently in the process of privatization; many industrial sites in Poland are contaminated, and most industrial enterprises are heavy polluters. However, when privatization first began, the Polish government had no policy for dealing with environmental issues, including allocating liability for past contamination. The Privatization Ministry initially addressed environmental protection issues only when potential Western buyers raised them, and then on an ad hoc basis. Scholars and environmentalists (among others, Kruszewska 1993; Stodulski and Starczewska 1993; Bell and Kołaja 1993) criticized this approach and called for the institution of regular procedures for conducting environmental audits and allocating liabilities. In fact, the Privatization Ministry had (and still has) no legal authority to conduct environmental audits or allocate environmental liabilities (see 1990 Dz. U. No. 51, item 298). Since 1992, however, a process for introducing environmental considerations into the privatization process has been evolving within the Polish administration. In May of that year, the Privatization Ministry and the Environmental Protection Ministry established an Interministerial Environment Unit (IEU) responsible for developing policies and procedures for resolving environmental issues in privatization (*Porozumienie między Ministrem Ochrony Środowiska, Zasobów Naturalnych i Leśnictwa a Ministrem Przekształceń Własnościowych w sprawie powołania międzyresortowego zespołu do spraw uwzględnienia zagadnień ekologicznych i usprawnienia procesów własnościowych*, 1992; also see *East European Business Law*, May 19, 1992). Since its inception, the IEU has had a substantial positive impact on the resolution of environmental issues arising in privatization transactions. According to Susan Cummings (1994, 605–8), an American attorney who has worked for Poland's Privatization Ministry and served on the Interministerial Environment Unit, the IEU has improved communications between the Privatization Ministry and the Environmental Protection Ministry, developed a consistent policy with respect to environmental issues in privatization, and introduced innovative procedures for resolving those issues (including the creation of contractual clauses providing for conditional indemnification from liability and cost-sharing between investor and state). In addition, the IEU has helped to educate the Privatization Ministry on environmental issues, increasing its awareness and ability to account (economically) for environmental problems in privatization transactions.

Despite these process improvements, we might argue that the Polish government should have foreseen the environmental implications of privatization at the outset of the systemic transition; certainly some issues and controversies might have been avoided. But it is important to bear in mind that there was no preexisting blueprint for Poland's political-economic transformation; no country ever before has attempted such a broad privatization of the means of production. We should not be surprised or overly dismayed by the Polish government's failure to foresee every issue, no matter how significant. It is more important that the government has recognized and responded effectively to problems as they have arisen; that is how the reform process evolves and progresses. The Polish government's response to environmental protection concerns in privatization has been pragmatic. Some environmentalists would prefer a more radical approach. Roger Manser (1993, 105), for one, has called for the imposition of retroactive environmental liability on investors purchasing state properties, noting correctly that this is the law in many Central and East European countries. Indeed, under Poland's 1990 Privatization Act, the privatized firm assumes all of the rights, duties and liabilities, including environmental liabilities, of the state-owned enterprise (1990 Dz. U. No. 51, item 298, art. 8, sec. 2). However, neither the privatization law nor any other statute expressly prohibits the alienation or contractual allocation of environmental liabilities. Therefore, they probably fall within the general freedom of contract provision of Poland's 1964 Civil Code (1964 Dz. U. No. 16, item 93, art. 72; also see Wajda and Sommer 1994, 180). In any case, negotiating environmental liabilities has become an accepted practice in Poland, and that certainly is the best policy. A contrary rule that would automatically and irrevocably impose retroactive environmental liability on buyers in privatization would be unfair and inefficient. Such a rule would have made sense under socialism, when enterprises literally were administrative agencies, and 'ownership' transfers constituted little more than administrative reforms; in every case, the 'buyers' and 'sellers' were both agents of the same principal, the Party/state. However, in Poland's new political-economic system, buyers in privatization often have no ties to the previous 'owners' who caused the contamination, and so it would be substantially unjust to impose liability on them (see Boyd 1994, 65). More than unjust, it would be pointless. The practical effect would be to discourage potential buyers of state-owned properties (especially in cases where the environmental liabilities approximate or exceed total enterprise assets). So the entire privatization process would simply grind to a halt. That would be disastrous for environmental protection in Poland, where private firms, subject to hard budget constraints, are leading the environmental and economic recovery. Indeed, the analysis in Chapter 5 suggests that the greatest threat to continuing environmental improvements in Poland may be the perpetuation of large and inefficient state-owned enterprises, subject to governmental conflicts of interest and soft budget constraints (see Czaja et al. 1994, 42, asserting that the acceleration of privatization in the electric power industry should contribute to environmental protection).

This has important implications for 'commercialization' and other forms of *ersatz* privatization that would maintain state ownership and control indefinitely.

Improved Environmental Law Enforcement in Post-Communist Poland

In the first part of the transition period (from 1990 to 1992), Poland's parliament was quite active in the field of environmental protection. In addition to amending Poland's 1980 Environmental Protection and Development Act, it enacted and amended a number of other important environment-related statutes. In 1991 alone, the *Sejm* enacted a new preservation-oriented nature protection law (1991 Dz. U. No. 114, item 492),¹⁸ a maritime administration law with oil spill prevention and clean-up provisions (1991 Dz. U. No. 16, item 73), amendments to the forest protection law that mandated ecologically sustainable forest management (1991 Dz. U. No. 101, item 444), and new enabling legislation for the State Environmental Protection Inspectorate (1991 Dz. U. No. 77, item 335).¹⁹ The Inspectorate law, in particular, has had a momentous impact on environmental protection in post-Communist Poland. It was designed to improve environmental monitoring and law enforcement, long considered the weakest links in Poland's environmental protection regime (see Jendroška 1992, 533; 1993a, 351), by increasing the authority and independence of the State Environmental Protection Inspectorate.

Prior to 1991, the Inspectorate was a small and almost powerless agency attached to the Environmental Protection Ministry. Its 400 poorly paid, poorly equipped and poorly trained employees were charged with monitoring environmental compliance at some 43,000 polluting enterprises nationwide. But they had almost no power actually to enforce the law against violators. As Jerzy Jendroška (1993a, 352) has written, the Inspectorate was an environmental 'watchdog without teeth.' But then the 1991 Law on the State Environmental Protection Inspectorate gave that watchdog sharp new dentures. The new law empowered the Inspectorate to impose non-compliance fines, shut down dangerous polluters and ban the import or sale of environmentally harmful raw materials, fuels, machinery and technologies. Inspectors can impose environmental mitigation measures on new plants, which cannot begin operations until they are certified in compliance. And the Inspectorate now exercises oversight authority over all environmental monitoring in Poland; it sets the standards for all other monitoring agencies and laboratories. Consequently, monitoring procedures that used to be haphazard have become consistent. The Inspectorate operates a national database for environmental information collected by regional monitoring agencies and laboratories; and it serves as a clearinghouse providing environmental information to other government agencies, non-governmental organizations and the public. Finally, the 1991 law ensured improved funding and staffing so that the Inspectorate could carry out its new and expanded responsibilities. Today, the agency employs 3,000 environmental inspectors operating out of 50 offices

(including the Warsaw headquarters and a branch office in each of Poland's 49 *województwa* [administrative regions]).²⁰

The increased power of the State Environmental Protection Inspectorate has led directly to improved environmental monitoring, compliance and enforcement in Poland since 1991. For example, among the near-term priorities of the Environmental Ministry's National Environmental Policy (1991) was to reduce emissions from Poland's 80 largest polluters, which collectively were responsible for an estimated 80 percent of all industrial pollution (see *Rzeczpospolita*, Feb. 17, 1995). Pursuant to that program, by 1993 the Inspectorate had issued more than 3,000 *decyzji* requiring polluters on the 'list of 80' to install pollution-control equipment; it completely shut down 7 plants; it closed parts of 25 plants, and it temporarily halted production at 22 others. These actions have resulted in substantial pollution reductions. According to information from the Chief Inspector's office, dust emissions from cement plants on the list declined by 60 percent; lead and copper emissions from foundries on the list fell by 60 and 32 percent, respectively; and carbon dioxide emissions from listed power plants decreased by 40 percent (see *Bureau of National Affairs, International Environment Daily*, May 28, 1993). By 1995, the volume of wastewater effluent discharged by listed factories had declined by about 37 percent, and toxic waste by about 42 percent (*Rzeczpospolita*, Feb. 17, 1995). These significant pollution reductions are not temporary by-products of economic recession but the direct effects of deliberate environmental law enforcement activities. As of 1995, 14 plants had been removed from the original list of 80—3 of them had gone out of business, while the other 11 had reduced their pollution emissions to such an extent that they no longer qualified for the 'list of disgrace' (*Rzeczpospolita*, Feb. 17, 1995).

The greatest testament to the increased power and effectiveness of the State Environmental Protection Inspectorate comes from those who now seek to dismantle it. In a recent meeting with central administrators, regional (voivodship) authorities and city 'presidents,' acting on behalf of their own provincial economic interests, called for the abolition of the Inspectorate (see *Biuletyn Niecodzienny BORE*, May 31, 1995). This seems unlikely to happen, but the point is that no one would bother with the Inspectorate were it not having a significant impact.

Of course, the Inspectorate would *not* be having a significant impact, regardless of its increased statutory authority, were it not for systemic reforms, most notably the institution of a constitutional *Rechtsstaat* (literally 'law state') in Poland. As we saw in Chapter 4, during the socialist era, environmental statutes, like all laws, were mere policy instruments that the Party/state simply disregarded (under the vacuous constitutional doctrine of 'socialist democracy') whenever they proved inconvenient. That no longer is the case. There has been a profound change in Poland's legal culture that has received far too little attention.

One good example of how much the legal culture has changed is the fight over environmental protection equipment at Warsaw's Okęcie II airport. As discussed in Chapter 4 (§4.2), in the mid-1980s (before the fall of communism) War-

saw city officials entered into an agreement with a West German-led consortium to build a new international airport. The 1980 EPDA required the airport, as a new development project, to install all environmental protection equipment deemed necessary by the State Environmental Protection Inspectorate. Inspectors ordered the airport to install sewage treatment and incineration plants, noise monitors and acoustic barriers. However, in an agreement that typified the status of law under Communism, Warsaw city officials summarily waived the environmental rules. This was done behind closed doors, without any public comment. And, of course, at that time, the Inspectorate had no independent authority to enforce compliance with its own orders. So Okęcie II was built without the required environmental installations. However, by the time the new airport was ready to open in 1992, the political-economic system had changed; the law was no longer subordinate to politics and the airport's non-compliance with environmental requirements was headline news all over Poland (see *The Warsaw Voice*, July 5, 1992; *Super Express*, June 29, 1992; *Gazeta Wyborcza*, June 29, 1992). The regional environmental protection inspector from Warsaw threatened to prevent the airport from opening (see *Polish News Bulletin*, Mar. 25, 1992). The Chief Inspector ultimately decided that the airport could open, but only if the airport authorities agreed to retrofit all of the originally required environmental protection equipment within 18 months (see *Reuter Textline/Rzeczpospolita*, June 29, 1992). His decision was later ratified in the High Administrative Court (see *PAP News Wire*, May 21, 1993). Thus, the law was substantially (if imperfectly) enforced. The story of Okęcie II shows that the law in post-Communist Poland is becoming a real source of social control; politicians, administrators and managers can no longer simply ignore it.

Investing in Environmental Protection

Environmental spending in Poland has increased greatly since 1989, primarily because of increased collections of environmental fees and fines. Table 7.7 shows that Poland's rate of investment in environmental protection throughout the 1970s and 1980s closely tracked the performance of the economy. As we saw in Chapter 5 (§5.2), when Poland's economy stagnated or declined (as it did through much of the 1980s), environmental projects always were among the first budget items cut. Socioeconomic planners considered them expendable luxuries, and most Polish citizens agreed that in tough times the country could not afford expensive environmental protection. To the end of Poland's socialist 'experiment,' environmental protection investments never even approached 1 percent of GNP.

As the data in Table 7.7 show, within two years after the first Solidarity government took power, Poland's environmental protection budget doubled. In 1991, Poland spent 1.1 percent of GNP on environmental protection. This marked the first time that Poland ever 'reached a relative level of environmental investment effort commensurate with what is spent per unit of GDP in the OECD countries'

Table 7.7. Economic growth and environmental investments in Poland, 1976–93

	<i>Economic growth rate (%)</i>	<i>Environmental investments</i>	
		<i>As % of GNP</i>	<i>As % of total investment</i>
1976	4.1	0.40	1.2
1977	2.8	0.45	1.4
1978	3.7	0.38	1.3
1979	–1.9	0.35	1.2
1980	–2.6	0.28	1.0
1981	–5.3	0.20	1.2
1982	–0.6	0.25	1.4
1983	4.6	0.40	2.2
1984	3.4	0.50	2.5
1985	1.1	0.54	2.8
1986	2.8	0.74	2.9
1987	–2.4	0.80	3.5
1988	1.6	0.80	3.5
1989	–1.0	0.80	2.9
1990	–11.6	0.70	3.7
1991	–7.0	1.10	5.4
1992	1.9	1.30	6.5
1993	4.0	1.30	6.4

Sources: Economic growth rates, 1976–87—Fallenbuehl (1989, 103, table 1); 1988–93, Bossak (1994, 34, table 3); environmental investment rates—GUS, Ochrona Środowiska (various years).

(Żylicz 1994a, 98). And it was an especially remarkable achievement considering Poland's deep economic recession—in most countries, during periods of declining (real) per capita income, expenditures on 'quality of life' concerns such as environmental protection remain stagnant or fall (see Cole 1995c, 298–9). Poland managed to increase environmental investments despite the economic recession by legally divorcing collected environmental charges from general budget revenues; environmental fees and fines were earmarked for environmental purposes only (see Jendrośka 1996b).

Poland's increased environmental protection budget provided direct funding for badly needed environmental improvements, especially sewage treatment

plants. In 1989, 44 percent of Poland's cities—including its two largest, Warsaw and Łódź, with a combined population of 2.5 million—were without operational sewage treatment facilities; fully 100 percent of their municipal wastes was dumped completely untreated into surface waters. Between 1989 and 1991, 866 new sewage treatment plants were put into operation, increasing daily national treatment capacity by 2,467,000 cubic meters (Żylicz 1994a, 100, table 4). As a result, the amount of treated waste increased from 62 to 70 percent in the four-year period from 1988 to 1991. Meanwhile, the amount of municipal and industrial wastewater requiring treatment decreased by 700 million tons (Żylicz 1994a, 101, table 6). In nominal terms, this meant that Poland dumped 130 million fewer tons of untreated sewage into surface waters in 1991 than in 1988. As more wastewater treatment plants come on line, further improvements are expected. In 1993, 341 more sewage treatment plants were completed (*Polish News Bulletin*, Sept. 1, 1994), and hundreds more plants currently are under construction throughout Poland (*PAP News Wire*, Feb. 22, 1994). In addition to sewage treatment plants, funds from the environmental protection budget also have been used to install advanced pollution-control technologies at Poland's two biggest air polluters, the Belchatów and Turów coal-fired power plants. As a result of these investments, sulphur dioxide emissions from the two plants will be cut by 90 percent (*The Warsaw Voice*, Oct. 3, 1993).

Environmental investments have increased at the local and regional levels of administration as well. Each region gets to keep 60 percent of the environmental fees and fines it collects for local environmental improvements (see Miłaszewski 1993, 118). And these funds are being put to good use. For instance, in 1995, Wrocław (Poland's fourth-largest city, with a population of half a million) modernized its 25 district heating boiler houses, cutting their aggregate air pollution emissions in half (*Reuter Textline/Rzeczpospolita*, Jan. 31, 1996).

In addition, Poland's environmental protection budget now supports several independent financial institutions for public and private environmental projects, including the National Fund for Environmental Protection (supported by collected environmental charges), the Eco-Fund (supported by a debt-for-nature swap arrangement with Poland's sovereign 'Paris Club' creditors), and an Environmental Protection Bank (*Bank Ochrony Środowiska*) that provides low-interest loans for environmental improvement projects. At their founding, each of these institutions was unique, the first of its kind in the world.

Poland's parliament created the National Fund for Environmental Protection (National Fund) in articles 87 and 88 of the 1980 Environmental Protection and Development Act (EPDA) (1980 Dz. U. No. 3, item 6). The Fund receives 40 percent of collected environmental fees and fines, which it invests in public environmental projects. In 1992, it invested a total of 12 trillion zlotys (about US\$880 million), accounting for 40 percent of all environmental investments in Poland (*Rzeczpospolita*, July 13, 1993; also see *Polish News Bulletin*, July 13, 1993). Among its various investments, the National Fund has financed projects

near Nowy Targ and Pyrzyce to tap geothermal water deposits 'large enough to heat a third of the country;' and the Fund is currently financing the production of unleaded gasoline at the Gdańsk petrochemical enterprise (*The Warsaw Voice*, Jan. 29, 1995). The National Fund is widely viewed as 'the most innovative environmental financing program in Europe.' Indeed, when a delegation of Chinese officials recently traveled to the United States to learn more about funding environmental protection, American officials from the Export-Import Bank recommended that they study Poland's National Environmental Protection Fund (*Warsaw Business Journal*, Jan. 19, 1996).

A separate Eco-Fund (*Eko-Fundusz*) was established in 1991, pursuant to Poland's debt reduction agreement with the Paris Club of sovereign creditors. At the time, Poland owed the Club's 17 member countries approximately US\$32 billion, and the debt reduction agreement signed in April 1991 called for a net debt reduction of 50 percent. On top of that agreement, Poland's then-Prime Minister Jan Krzysztof Bielecki proposed a long-term debt-for-nature swap: if Paris Club members would forgive an additional 10 percent of Poland's debt, the Polish government would devote proportionate resources to an internationally managed Eco-Fund that would finance internationally significant environmental projects, such as projects to protect the Baltic Sea, preserve biological diversity and reduce emissions of greenhouse gases and other transboundary air pollutants. This deal, if fully adopted, could yield an additional US\$3 billion for environmental projects in Poland over 18 years, while significantly reducing Poland's foreign debt. So far, however, only the United States, Switzerland, France and Italy have agreed to participate in the Eco-Fund, bringing its total base operating budget to approximately US\$450 million. In its first year of operation, the Eco-Fund contributed 145 billion zlotys or about 6.5 million 1993 USD to 18 projects, including sewage treatment plants, air pollution control equipment, forest preservation and national parks (*The Warsaw Voice*, July 18, 1993; *Polish News Bulletin*, June 18, 1993).

Poland's Environmental Protection Bank is the first commercial bank in the world established for the sole purpose of supporting environmentally sound projects. The idea originated in the 1989 'Round Table' agreements, and the bank was chartered by parliamentary amendment to the 1980 EPDA. The bank's founder, organizer and main shareholder is the National Fund for Environmental Protection, which earmarks a percentage of its earnings from collected environmental fees and fines to subsidize the bank's low-interest loans. Loans provided by the bank have been used to build sewage treatment plants (e.g., near Warsaw, Bydgoszcz and Plock) and to convert factories from electric to natural gas heating (see *The Warsaw Voice*, Jan. 24, 1993). Most impressively, the Environmental Protection Bank happens to be one of the most secure financial institutions in Poland today. In 1992, it earned a gross profit of 85 billion zlotys (over 6 million 1992 USD), and ranked third in capital holdings among Poland's private and cooperative banks (*The Warsaw Voice*, Feb. 21, 1993, Sept. 13, 1992). It now has 10 branch offices throughout Poland.

Competition and Technological Innovation in the New Buyers' Markets

Poland's market reforms have provided long-awaited outlets for pent-up consumer demand. As we saw earlier in this chapter, between 1989 and 1992 (i.e., during Poland's deep economic recession), consumer sales increased by 5.8 percent (after adjusting for inflation); the number of cars on Polish roads increased dramatically, and demand for gasoline remained constant despite steeply rising prices. By 1992, Poland had more television sets per 1,000 inhabitants than Italy, Portugal, Ireland or Greece (*Polish News Bulletin*, June 22, 1993).

For Poland's environmentalists, this evidence of burgeoning consumerism is cause for grave concern. Some of that concern is legitimate; consumerism can generate great ecological stress. But it is not an unmitigated environmental evil. Indeed, consumerism is bringing tangible environmental benefits for Poland. Specifically, it is driving Poland's economy away from more highly polluting heavy industrial production to the production of consumer goods and services; and that shift is reducing the total level of environmental stress produced by Poland's economy.

It is an axiom of market economics that consumer preferences drive production patterns. As consumers specify preferences for goods and services, production shifts away from more environmentally stressful heavy industrial production (Radetzki 1990, 26). This trend is evident in post-Communist Poland. According to the World Economy Research Institute at Warsaw University (Brocka-Palacz 1994, 53–4), the 7 percent rise in industrial output Poland experienced in 1993 was 'chiefly a matter of consumer demand.' Retail sales that year increased by 11 percent in real terms. The lion's share of the growth was in the manufacturing, light industry and food-processing sectors. By contrast, output was stagnant in metallurgy and actually declined in the mining and energy sectors. It is also interesting to note that virtually all of the growth in industrial production was recorded in Poland's private economy. In 1993, private sector GDP grew by a whopping 13 percent, whereas public sector GDP declined by 4.1 percent; in value terms, the private economy grew by 39 percent, while the public economy fell by 6 percent (United States General Accounting Office 1995, 47, 128). There is no doubt that these consumer-driven changes away from heavy industrial production are good news for Poland's natural environment.

Consumerism also spurs environmentally beneficial technological innovation, as the fight for shares of competitive markets impels firms to improve quality and reduce costs by, among other means, increasing factor productivity (the productive output from each input unit of labor, capital and natural resources). The result is greater conservation of resources in production. As we saw in Chapter 5, this phenomenon, which has been observed in virtually all advanced capitalist economies, did not occur in Marxist socialist economies because they lacked competitive markets, scarcity pricing for resource inputs (other than labor) and adequate intellectual property rights (see generally Cole 1995c). In post-

Communist Poland, aggregate efficiency indices have been improving steadily thanks largely to higher resource prices, hardened budget (and law) constraints, the institution of competitive markets, and the profit motive. Between 1992 and 1994, the labor intensity of Polish GDP declined by 5 percent; the capital intensity of GDP fell by 6.7 percent; and, most importantly for environmental protection, the energy intensity of GDP dropped by 13.6 percent (*Polish News Bulletin*, May 16, 1995).

As we learned in Chapter 5 (§5.4), the former Soviet bloc countries lagged decades behind the West in technological development, including for environmental protection (see, among others, Peterson 1993, 47). For example, Polish environmental protection inspectors used to rely on hand-held ambient air quality monitors that were not uniformly calibrated (see Nowicki 1992, 211); they were vastly inferior to Western monitoring equipment. Today, Poland is bridging the technology gap with foreign technology transfers and domestic innovations. Poland's environmental inspectors now utilize monitoring and laboratory equipment that meets European Union standards (*The Warsaw Voice*, May 1, 1994). And it is not too wild an exaggeration to say that, in the past half-decade, Polish scientists have come up with almost as many technological innovations for environmental protection—including new coal cleaning technologies (see *The Warsaw Voice*, Nov. 21, 1993), a new alcohol-based gasoline (see *Polish News Bulletin*, Mar. 7, 1994), and a new nuclear-based emissions reduction technology (see *Polish News Bulletin*, Mar. 31, 1993)²¹—as in 40-plus years of (real existing) socialism. These and other technological improvements are contributing to increased factor productivity in post-Communist Poland.

International Cooperation for Sustainable Development

In February 1995, the Constitutional Commission of Poland's Parliament approved language for article 5 of a new (yet to be adopted) constitution:

The Republic of Poland safeguards the independence and inviolability of its territory, guarantees the human rights and liberties, ensures the security of its citizens, safeguards the national heritage, and *ensures the protection of the natural environment guided by the principle of sustainable development*. (Quoted in *Polish News Bulletin*, Feb. 9, 1995)

This provision is consistent with the Environmental Protection Ministry's National Environmental Policy (1991), which established the goal of achieving sustainable development throughout the Polish economy within 30 years. The concept of sustainable development is famously fuzzy; no one is quite sure what level or mode of development (if any) is sustainable. This serves to make the phrase 'sustainable development' a convenient reference point for empty politi-

cal rhetoric.²² But the Polish government, at least, has backed up its rhetoric with some meaningful actions.

Poland has been active in pursuing international arrangements to promote sustainable development. It has established 'euro-regions' along its borders with Germany, the Czech Republic, Slovakia and Belarus, where joint environmental protection and conservation projects are planned (see, e.g., *BBC Summary of World Broadcasts*, Nov. 2, 1993; *The Warsaw Voice*, Apr. 4, 1993; *PAP News Wire*, Aug. 20, 1993). In April 1994, Poland and Germany signed an environmental treaty that, among other things, provides for joint monitoring, collaboration in environmental investigations, and information exchanges in the border regions. Most significantly, the treaty gives Polish citizens the right to participate in public hearings concerning proposed developments and environmental projects on the German side of the border (*The Week in Germany*, Apr. 22, 1994). The Polish government also has initiated what is being called 'the greatest cooperation project in environmental protection' in all of Europe (*PAP News Wire*, Feb. 11, 1993): the 'Green Lungs of Europe.' The idea is actually an extension of a preexisting program, the 'Green Lungs of Poland,' initiated more than a decade ago by a forester and hiker from Białystok named Krzysztof Wolfram (now a member of Poland's parliament). The goal of the international program is to ensure ecologically sustainable development of a vast unspoiled region of Central and Eastern Europe, covering 760,000 square kilometers and including parts of seven countries—Estonia, Latvia, Lithuania, Russia, Ukraine, Belarus and Poland. In March 1992, environmental officials from those countries met in Poland to sign the 'Wigry Declaration,' which established the 'Green Lungs of Europe.' In February 1993, they signed the final accord in Warsaw. Poland's national commitment to the 'Green Lungs' project is sizeable—50,000 square kilometers, comprising 18 percent of the country's territory. According to the agreement, all future economic development in the region must be 'undertaken in harmony with nature, making it possible to preserve the natural environmental intact for future generations' (*The Warsaw Voice*, Apr. 4, 1993). This commitment entails substantial political and economic risks for the Polish government because the protected region already suffers from the highest rate of unemployment in the country.²³ But it is a far-sighted and innovative program, extending far beyond traditional 'end-of-the-pipe' environmental policies.

7.5. The Fragmentation and Maturation of Poland's Independent Environmental Movement

Some of the credit for Poland's environmental improvements over the past half-decade must go to its growing and maturing independent environmental movement. As discussed in Chapter 2, the movement took root in People's Poland at the beginning of the 1980s, during the dawn of Solidarity that preceded the

darkness of Martial Law. Tolerated by the Communist Party/state, groups such as the Polish Ecology Club managed to effect limited political change and influenced environmental policy. By 1988, Poland had an officially registered but poorly organized Green Party; and by 1989, there were approximately 200 non-governmental organizations (NGOs), groups and foundations in Poland concerned wholly or partly with environmental policy (see Czajkowski 1990, 1–11; Gliński 1989, 31).

The Fragmentation of the Movement

As the Communist system collapsed, Poland's environmentalists, with years of political activity under their belts, appeared well positioned to play a prominent role in the new democratic Polish Republic. But the emergence of democratic pluralism in Poland revealed philosophical, political and social divisions among environmental groups, and between those groups and their former opposition allies. Those divisions always existed, of course, but during the 1980s they had been masked by an 'us versus them' mentality fostered by their united opposition to socialist totalitarianism (see Gliński 1992, 267). In the first years after the end of communism, Poland's environmental movement broke with other segments of the former opposition movement, including the Solidarity trade union and Farmers' Solidarity, which represented the less- or non-ecologically motivated interests of workers and farmers, respectively. Divisions also developed within the environmental movement, as groups positioned themselves along Poland's sociopolitical continuum. Many environmental groups, including the Polish Ecology Club, splintered. After just two months of existence, Poland's Green Party, which allegedly had been infiltrated by the secret police (Gliński 1996, 199), split into 'three mutually hostile groups'; consequently, it did not participate in the 1989 elections (Gliński 1992, 267).²⁴ It survived only as a 'sofa party' (*partia kanapowa*), a party so small that its entire membership could fit on a single sofa (Gliński 1996, 209–11).

Divisions within the environmental movement were magnified by Poland's systemic transformations. When the Mazowiecki government came to power in September 1989, environmental groups affiliated (or previously affiliated) with Solidarity had a unique opportunity not just to influence but to fashion environmental law and policy. However, many environmentalists were ambivalent. For one thing, they retained a vestigial distrust of law and the state from 40-plus years of Communist rule. Many environmental groups scorned the new government's focus on market-oriented economic reforms, which they viewed as a 'voracious economization' of the country (Gliński 1996, 109–211); to them totalitarian socialism and market capitalism were virtually equal in their menace to the natural environment. Some of these groups formed the core of a new anti-government protest movement, while others chose to divorce themselves entirely from politics

and government in order to live alternative lifestyles outside the mainstream of Polish society (Gliński 1993, 146–7; 1994, 148–9).

There were, however, some environmental groups that supported market reforms as a practical necessity for improving environmental protection. Their members went to work within the government or tried to influence policy from without. Over the past half-decade, these groups have grown increasingly capable, professional and, not inconsequentially, influential. They have learned how to cooperate and consolidate their forces to gain maximum leverage to influence government environmental policy making. Their efforts have been facilitated by a ‘Service Office for the Environmental Movement’ (SOEM), which acts as an information center for non-governmental environmental organizations (of all stripes) throughout Poland. SOEM provides professional and legal assistance, and facilitates contacts between Polish NGOs and compatible international organizations (see *The Warsaw Voice*, July 30, 1993).

The inability of Poland’s environmental movement to remain unified after the fall of communism certainly is understandable. As the experience of Solidarity itself shows, broad-based social movements typically do not remain united for long after their unifying catalyst—in this case, the Communist Party/state—is removed (see generally Bugajski and Pollack 1989). So the fragmentation of Poland’s environmental movement probably was inevitable. Nevertheless, the sheer size of the movement—as of 1995 more than 700 environmental groups were operating in Poland, and that number swells to more than 1,000 if local environmental clubs and branches of national organizations are counted—has empowered Poland’s environmentalists to assert substantial, if inconsistent, influence over state environmental policy. And, despite its fragmentation, the movement has recognized the need for greater cooperation, as evidenced by well-organized and well-attended annual meetings of environmental groups that have taken place in Poland since 1990. There has been at least enough cooperation within the movement to foster successful protest actions and litigation designed to publicize and promote environmental issues.

Traditional Forms of Environmental Activism

In 1989 and 1990, environmental groups successfully protested against the country’s first planned nuclear power plant at Żarnowiec (see Box 7.1). The support of Poland’s Greens was also instrumental in getting the ‘Green Lungs of Poland’ project off the ground (see Nagy et al. 1994, 254).

Traditional environmental activism has not always proven successful, however. A series of protests in 1991 against a planned hydroelectric dam project at Czorsztyn failed to deter construction. But neither was it a complete failure. The protestors did persuade the government to supplement the dam project with funds to build a sewage treatment plant in the basin; the government even agreed not to

Box 7.1. The Story of Poland's Żarnowiec Nuclear Power Plant

Poland's first nuclear power plant was to be built in the small northern town of Żarnowiec. Construction began in 1982, and was expected to be completed in 1993. But, as with so many large-scale projects in the socialist economy, construction dragged on for several years. Progress was also hampered by the protests of environmentalists from the Polish Ecology Club and other groups, which gained strong public support especially following the 1986 Chernobyl nuclear disaster in the Soviet Ukraine. Government officials tried to play down the similarities between Chernobyl and the Żarnowiec plant, but without success. Nevertheless, the Party/state pushed forward with construction. In 1989, the Żarnowiec plant was only about 40 percent completed, when it became a major topic of conversation at the 'Round Table' negotiations between Solidarity and the Party/government. Public opinion polls at that time showed that 86 percent of those living in the plant's vicinity were opposed to the project. When Poland's first post-Communist government took office in September 1989, it declared a 10-year moratorium on nuclear power and immediately suspended construction at Żarnowiec. The government later proposed to 'liquidate' the power plant and convert its existing facilities into a potato-processing plant and a brewery. In 1991, the Organization for Economic Co-operation and Development (OECD) recommended that Poland introduce nuclear energy by the year 2005. But successive Polish governments have shown no signs of renewed interest in nuclear power. In fact, in June 1994, the government sold nuclear equipment designed for the Żarnowiec plant to Hungary, for use in a nuclear power training center.

Sources: BBC Summary of World Broadcasts, May 19, 1986; Oct. 5, 1989; Feb. 20, 1989; Mar. 6, 1989; Nov. 3, 1995; U.S. News & World Report, Dec. 8, 1986; Reuter Textline/Rzeczpospolita, Sept. 1, 1990; Polish News Bulletin, Sept. 4, 1990; European Energy Report, Sept. 21, 1990; PAP News Wire, Feb. 16, 1993, June 28, 1994; The Warsaw Voice, Mar. 7, 1993.

operate the dam until the sewage treatment plant was ready. In addition, the protests fostered public debate about the development project, and more generally contributed to public awareness of environmental issues. Finally, the Czorsztyn dam experience led at least one environmental group to change its approach; it began to supplement its direct protest actions with 'more rational and moderate' negotiations with political and administrative officials. The price of this, however, was even greater fragmentation and dissent within the movement (see Gliński 1996, 148).

Legal Changes for Greater Public Participation in Environmental Policy Making

Poland's more sophisticated environmental groups all along have used legal and political mechanisms to influence environmental policy. They have used lawsuits to stop polluters. For example, in 1989, a non-governmental organization in Łódź (Poland's second-largest city, with a population of about 1 million) sued the local municipal transportation company for violating air pollution norms. The court ordered the company to install pollution-reducing filters on each bus (Gliński 1996, 148). Even more important for long-term environmental protection in Poland, environmentalists have lobbied successfully for changes in administrative procedures that, in turn, have increased their access to influence environmental policy making. As we saw in Chapter 3 (§3.5), before the fall of communism, public rights to participate in environmental decision making were quite limited. Since 1989, the situation has been improving slowly. Public access remains restricted, but there have been several symbolic and a few real improvements. Among the symbolic improvements are provisions in the environmental protocol to the 'Round Table' accords, new constitutional amendments and provisions in the 1991 National Environmental Policy. The environmental protocol to the 1989 'Round Table' accords, signed by representatives of Poland's last Communist government and the Solidarity opposition, called for the expansion of public rights to sue to protect the environment and complete public access to environmental information, but these policies have not yet been legally enacted. Poland's Constitution was amended in 1992 to extend citizens' rights to (1) 'participate in exercising social control, in consultations and discussions upon important issues concerning the development of the country,' (2) 'approach all organs of the State with complaints and grievances,' and (3) have appeals heard 'without delay and justly' (1992 Dz. U. No. 75, item 367, art. 86).²⁵ These new constitutional rights are not particularly meaningful, however, because State agencies still have complete discretion to ignore citizens' requests without judicial review (Nagy et al. 1994, 238). Poland's 1991 National Environmental Policy incorporated into its statement of principles a similar provision calling for greater public participation in environmental decision making and access to environmental information. This statement of principles carries even less—that is to say, no—legal force. Nevertheless, these symbolic provisions concerning public participation in administrative decision making have induced the Environmental Protection Ministry to afford slightly more *real* public participation in its administrative processes.

Since March 1992, the Minister of Environmental Protection has held monthly meetings with representatives of the environmental NGO community. Both sides perceive some benefit from these meetings. NGOs have an opportunity to influence environmental policy directly, while the ministry can drum up support for its policies (see Gliński 1996, 153). Also in 1992, the Minister of Environmental Protection established a 75-member Environmental Impact Assessment Commission

(EIA Commission) to review proposed development projects that would create 'especially harmful' environmental hazards. The EIA Commission is comprised of individuals from the ministry, academia and ecological organizations. Whenever a proposed project would have severe environmental impacts, the EIA Commission convenes a 15–25-member panel to review it. The panel announces its opinion at a public hearing, and then forwards it to the Minister of Environmental Protection, who has the final say. The minister's decision does not have to conform to or even consider the EIA Commission's opinion—in other words, the Commission's opinion is advisory only—but the minister's decision must be published in the Commission's Bulletin, which is open for public inspection (Nagy et al. 1994, 247–8). This adds some much needed transparency to the administrative decision-making process, helping to constrain politically (if not legally) ministerial discretion.

The most promising development for increased public participation in environmental decision making also happens to be the most recent: in May 1995, Poland's parliament enacted a new law that expanded the jurisdiction of the High Administrative Court, making it easier for environmental groups to obtain court review of agency actions (1995 Dz. U. No. 74, item 368). Among its numerous benefits, the new law permits environmental organizations to complain about agency actions even without participating (as parties) throughout the entire administrative process (see Jendrośka 1995, 6). This is a crucial change in the law. Prior to the 1995 Act, groups could not seek judicial review of administrative decisions unless they had participated from the outset of the administrative process, which greatly hampered the ability of citizens' groups to mount challenges. For example, when authorities proposed to develop a hazardous waste incinerator near Chojnów, local residents banded together informally; but as such they had no legal authority to participate as a party in administrative proceedings concerning the proposed incinerator. Only later did the Chojnów residents formally associate with the regional chapter of the Polish Ecology Club, which was authorized to intervene in administrative proceedings. But by that time the administrative proceedings already were well advanced. And because the residents had not participated as a party from the beginning, the High Administrative Court refused to hear their complaints. Under the new law, the residents would have been permitted to intervene as a party at any point in the proceedings. The new law also permits the High Administrative Court, for the first time, to hear complaints concerning administrative rules as well as adjudicatory decisions. According to Jerzy Jendrośka (1995, 6–7), this heralds 'a major breakthrough in legal practice, opening immense new possibilities for successful "green access to justice."'

7.6. The Future of Environmental Protection in Poland

Poland's record of environmental protection since the fall of communism is commendable, especially considering the deep economic recession of 1989–1992.

Deliberate environmental policies of the Polish government, facilitated by systemic reforms, have brought structural environmental improvements. But they have not yet ended the ecological crisis. Some regions of Poland remain severely contaminated.²⁶ At the beginning of 1993, national air pollution levels were still six times higher than the European Union's legal limit (*Guardian*, Mar. 6, 1993). Many of Poland's larger cities, including Poznań, Szczecin, Kraków and Łódź, still were without operational sewage treatment plants (*The Warsaw Voice*, Jan. 31, 1993). As a result, many Polish waterways were so polluted that 'you could develop film' in them (*Guardian*, Nov. 21, 1993). Poland's industries were still annually producing millions of tons of hazardous wastes, most of which was dumped at sites with no protection against groundwater contamination (*Polish News Bulletin*, Oct. 21, 1993; *BBC Summary of World Broadcasts*, Nov. 11, 1993). Meanwhile, public health continued to suffer. For example, in 1993, infant mortality in the heavily polluted region of Upper Silesia was 30 per 1,000 live births, twice the national average and five times the average in countries belonging to the Organization for Economic Co-operation and Development (OECD) (*Guardian*, Mar. 6, 1993).

These facts simply confirmed what most observers understood quite well in 1989: cleaning up the environmental mess created during 40-plus years of (real existing) socialism would not be quick, easy or cheap. Six years into the transitions, it is no surprise to find that Poland still has a long way to go. As Tomasz Żylicz (1994d, 86) has admonished, there will be no ecological miracle in Poland. But acknowledging this obvious truth should not prevent us from recognizing that very real progress has been made.

Environmental protection in Poland has improved significantly since 1989. These improvements have not been reversed or curtailed by the resumption of economic growth. And although it is true that successive Polish governments since 1992 have shown little or no interest in environmental protection, there remain two overriding reasons to expect continued improvement. First, on August 8, 1994, Poland applied for full membership in the European Union (EU), with the hope of joining by the year 2000 (see *Reuter East European Report*, Apr. 8, 1994). As a precondition to membership, Poland must 'harmonize' its laws, including its environmental laws, with EU Directives (see Wajda 1994). Harmonization will require more than simply enacting nice-looking laws. Mere paper changes unaccompanied by implementation and enforcement efforts are unlikely to impress current EU members; Poland will have to show continued *actual* progress in environmental protection (see Ryland 1995, 333). And just in case extra incentives are needed, the Polish government needs only consider the tremendous economic costs of excessive pollution and resource waste, which during the 1980s amounted to between 10 and 20 percent of annual GNP (see *Radio Free Europe/Report on Eastern Europe*, Oct. 5, 1990). For Poland, a stringent and costly environmental protection regime is likely to be much less expensive than doing nothing at all. Prudent environmental investments should yield substantial

economic returns. In 1995, Poland's Finance Minister, Grzegorz Kołodko, implicitly acknowledged this point when he declared that stabilizing pollution emissions is just as important for Poland's economy as stabilizing the zloty (*PAP News Wire*, Mar. 20, 1995).

The question remains whether 'harmonization' with EU Directives is enough, given Poland's serious environmental problems. Some have argued that Poland should pursue more '[r]adical environmental policies,' including immediately closing down all inefficient (and dirty) state enterprises and setting raw materials prices at levels reflecting the true social costs of their use (Manser 1993, 149–56). In theory, these suggestions are economically and environmentally attractive, but they are not feasible politically. Given the employment concerns of voters and the still potent political force of Poland's trade unions, it would be political suicide for any Polish government even to suggest such draconian measures.²⁷ Consider what happened in 1991, when the government attempted to close down the inefficient and highly polluting pig iron section of the Sendzimir steel mill in Nowa Huta; workers from the 'Solidarity '80' trade union went on a hunger strike until the order was rescinded (see *PAP News Wire*, Dec. 29, 1991). In 1990, when the Ministry of Environmental Protection tried to introduce an *ad valorem* fuel tax of 4 percent to be earmarked for the environmental protection budget, the Solidarity trade union issued the following statement: 'While the union is for environmental protection, it will not approve any such burden laid on the impoverished society' (quoted in Żylicz 1994a, 105). More recently, the Solidarity union defeated government plans to make the mining industry cleaner and more efficient (see *Polish News Bulletin*, Apr. 13, 1994, Apr. 27, 1994). Although we might deplore the fact that Poland's trade unions are fighting against environmental protection, their concern over the potential socioeconomic consequences of environmental policies is not illegitimate, especially considering that Poland's environmental taxes are already among the world's highest. Consider what the impact would be on the ordinary Pole's quality of life if environmental fees were set at true social cost levels and all inefficient state enterprises were immediately closed. Are the benefits of a quick and dramatic reduction in air pollution emissions worth the costs? Ordinary Poles already have suffered from successive resource price increases; at the beginning of 1992, coal prices in Poland were 18 times higher than they had been at the end of 1989, and gas prices for the average household were 80 times higher (see Czaja et al. 1994, 27). And there are unavoidable trade-offs between environmental protection and employment. For instance, closing down the unprofitable mines in the Walbrych region, which already suffers from one of the highest unemployment rates in the country, would put an estimated additional 15,000 Poles out of work (see Czaja et al. 1994, 36–7; *The Warsaw Voice*, Sept. 12, 1993).²⁸ It is certainly understandable that workers would protest against environmental protection policies that might cost their jobs. And it is far from clear that environmental concerns should trump labor concerns, notwithstanding Poland's ecological crisis.

Like everyone else in Central and Eastern Europe, Poles want improved environmental protection, but how much? Consider if Polish cities improved air quality during the next decade or so to the level of, say, Los Angeles. Would this be cause for celebration or recrimination? Los Angeles, as everyone knows, has the worst smog problem in the United States; it is the only city in the country designated 'extreme' non-attainment for ozone (the primary constituent of smog) under the Clean Air Act (42 U.S.C. §7511). But Los Angeles actually meets the federal smog standards more than 99 percent of the time (*Washington Times*, May 19, 1992). As those standards are set at levels to protect public health with 'an adequate margin of safety' (42 U.S.C. §7409(b)(1)), the health of Angelenos is presumably at some non-zero level of risk from smog less than 1 percent of the time. Consider, by contrast, the Polish city of Bytom, where public health is threatened by air pollution literally every hour of every day. According to a recent documentary on risk produced by public television station WGBH in Boston (1992), air pollution in Bytom *on an average day* is six times worse than in Los Angeles *during a smog alert*. Would Bytom's residents consider it a disappointing failure to achieve only the same levels of air pollution as Los Angeles? Given their extreme situation, we might suppose that they, more than others in Poland, would support draconian measures to reduce air pollution. But they too want to keep their jobs, homes and cars.²⁹ What could possibly persuade them that breathing (marginally) cleaner air is more important than earning a paycheck to support their families?

Although all Poles want improved environmental protection, there is little agreement on *how much*. This is not particularly surprising; after all, there is no scientific or sociopolitical consensus anywhere in the world on what constitutes *adequate* environmental quality. Perceptions of environmental risk and demands for environmental quality are often relative to other needs and concerns. Improving environmental protection is hardly the sole concern in post-Communist Poland. Whereas the needs of Polish society are vast and varied, resources are scarce. Ultimately, in a democratic Poland the people will decide with their votes and their pocketbooks how much environmental protection they desire.

Notes

1. This chapter is a revised and updated version of Cole (1995b). On Poland's economic crisis at the end of the 1980s, see, for example, Kondratowicz and Okolski (1991) and Clarke (1989). On Poland's environmental crisis, see Chapter 1.

2. The budget constraint, which was discussed in Chapter 5 (§5.5), will be further discussed in relevant sections of this chapter.

3. Subsequently, in August 1993, Poland's Minister of Environmental Protection issued a list of 106 categories of hazardous waste and toxic substances that could not be imported into Poland (see *Pesticide Action Network North American Updates Service*, Nov. 24, 1993).

4. For assessments of the 'December Amendments,' see M. Brzezinski and Garlicki (1995a, 32–3; Gray 1993, 96).

5. In some parts of Poland, the waiting period for housing then exceeded 50 years (see *New Yorker*, Nov. 13, 1989).

6. Poland's severe economic crisis at the end of the Communist era distinguishes it from Hungary and the former Czechoslovakia, and complicates the comparison of transition paths. As Leszek Balcerowicz (1994, 195) has explained, '[t]he initial economic conditions *do* matter, as far as the pace and effects of the transition are concerned. Therefore one should frame assessments of the results of this process in the context of initial conditions.'

7. Actually, I suspect it was both. As already noted, there was 'hidden' unemployment under socialism. But some level of unemployment (so-called 'structural' unemployment) must be considered a pathology of market capitalism.

8. But the inflation rate rose quickly again towards the end of the year after austerity measures were relaxed in response to intensifying public criticism and in view of impending presidential elections. Balcerowicz (1992, 170–1) later admitted that it had been a mistake to relax anti-inflationary measures at that crucial juncture. Nonetheless, since the introduction of the Balcerowicz Plan, inflation in Poland has never approached 'hyper' levels; in fact, it has declined fairly steadily. For 1994, the inflation rate was around 35 percent; in 1995, the rate fell below 30 percent.

9. For a more balanced, but still overly negative account of post-socialist environmental protection efforts in Poland, see Zechenter (1993).

10. This was in response to the hazardous waste import problems discussed earlier.

11. On September 13, 1995, the Environmental Law Group of the Polish Academy of Sciences in Wrocław convened a conference to begin the process of designing a new comprehensive environmental law to replace the 1980 EPDA.

12. Part IV of the EPDA also included provisions for civil and criminal liability, but, in practice, these were of secondary importance (see Cole 1995a, 334–7).

13. The nine examined sectors were mining, power, metallurgy, electrical–metal, chemical, mineral, wood–paper, light, and food. Poskrobko's and Cygler's study has been criticized for focusing only on Poland's largest polluters (Conversation with Bogusław Fiedor, Chair, Department of Economics, Wrocław Academy of Economics, Wrocław, Poland, August 14, 1995). However, it would seem that, if emissions charges exceed abatement costs for the largest polluters, they certainly should exceed abatement costs for smaller polluters, who do not benefit from the same economies of scale in pollution control as larger polluters.

14. But see *Wprost*, Aug. 21, 1995, claiming that 'businesses were much better off paying for polluting the environment rather than preventing it,' based on an unpublished report by Poland's Supreme Chamber of Control.

15. On January 1, 1995, the Polish zloty was redenominated; one new zloty was worth 10,000 old zlotys (see *Polish News Bulletin*, Dec. 28, 1994; *PAP*, Jan. 2, 1995).

16. In fact, production of major food crops (grain, potatoes, rape and sugar beet) in Poland declined by about 15 percent between 1990 and 1993. However, according to analysts from the World Economy Research Institute at the Warsaw School of Economics (Brocka-Pałacz 1994, 58–60), this was due mainly to declining rates of demand for foodstuffs. Of course, the declining rate of demand for foodstuffs would also explain some, but not all, of the reductions in fertilizer and pesticide use. On the environmental and economic effects of reducing pesticide use, see Pimental et al. (1991).

17. These figures do not include the hundreds of thousands of small retail businesses—hotels, restaurants and shops—that were quickly privatized under a separate ‘small privatization’ program.

18. This law is discussed in Cole (1995a, 354–5).

19. The *Sejm* also enacted some allegedly anti-environmental legislation in 1991. Specifically, it deleted provisions of Poland’s foreign investment law that authorized the Foreign Investment Council to deny permits on environmental grounds (1991 Dz. U. No. 60, item 253). However, as Elżbieta Zechenter (1993, 120n166) has noted, the Council retains authority to revoke the permits of foreign investors whose activities cause significant environmental damage. She nonetheless concludes that ‘the 1991 FIL (Foreign Investment Law) appears to be symptomatic of the current trend to disregard environmental issues among the Polish legislators who have ‘more pressing concerns to attend’ given the current political situation.’ However, those same legislators apparently were not too preoccupied with other political concerns to enact the four pro-ecological statutes discussed here.

20. See Radecki (1992a) for a complete overview of the 1991 Law on the State Environmental Protection Inspectorate.

21. The nuclear-based emissions reduction technology, in particular, has sparked great interest in the West and Japan. It involves the use of an electron beam fired into damped gases laced with ammonia. The process reportedly can be easily retrofitted even onto old plants at 30 percent lower cost than traditional emissions control technologies, and it consumes much less energy. It will reduce sulphur dioxide emissions by 90 percent and nitrogen oxide emissions by 80–90 percent (*Polish News Bulletin*, Mar. 31, 1993).

22. As a Polish economist recently explained it to me, the primary meaning of ‘sustainable development’ is sustainable research for scholars.

23. For more on the ‘Green Lungs’ program, see *The Warsaw Voice*, Apr. 4, 1993; *Greenwire*, Feb. 9, 1993; *Bureau of National Affairs, International Environment Daily*, May 12, 1993; *PAP News Wire*, Feb. 11, 1993; *BBC Summary of World Broadcasts*, Feb. 16, 1993.

24. The Green Party (and three other green parties organized just prior to the elections) did run in the 1991 elections, but lost badly because of poor campaign strategies and a lack of support from the environmental movement (see Gliński 1996, 212–25).

25. For a translation of the Polish Constitution, including recent amendments, see International Institute for Democracy (1995).

26. At the same time, we should bear in mind that the majority of Polish territory is *not* significantly polluted. Indeed, Poland contains some of the most pristine areas left in all of Europe, many of which are protected as national parks, nature reserves or landscape parks. Poland also is home to five world biosphere reserves (see, e.g., *The Warsaw Voice*, Apr. 2, 1995).

27. On the employment concerns of Polish voters, see *Polish News Bulletin*, Feb. 15, 1994.

28. The trade-off between jobs and environmental protection is more pronounced in Poland than many other countries for economy-specific reasons (see International Labour Organization 1989).

29. But see Hughes (1992, 70), arguing that the perceived trade-off between jobs and pollution reductions in Eastern Europe is illusory.

Chapter 8

INSTITUTIONAL IMPLICATIONS

8.1. Introduction

In the last chapter, we saw that environmental protection has improved markedly since Poland began the transition to market democracy. This supports the view, elaborated in earlier chapters, that the failure of environmental protection under socialism was systemic, that is, caused by various legal, political, economic and ideological institutions and organizations of (real existing) socialism. That surely was not their purpose, but that was their effect. Since the fall of communism, as old institutions have been replaced by new ones, the improvement in environmental protection (particularly in environmental law enforcement) has been dramatic.

The analysis suggests that there may be institutional preconditions to successful environmental protection. The purpose of this chapter is to adduce, in brief, some of those preconditions. I am mindful, however, that the analysis has focused predominantly (though not exclusively) on the experiences of a single country. Extrapolating from Poland's case to draw broad normative implications about political-economic prerequisites for environmental protection requires additional justification, which I attempt to provide in §8.2. In addition, the suggestion of legal, political, economic and ideological preconditions for *successful* environmental protection presumes an adequate and accepted measure for determining environmental success or failure. Section 8.3 addresses the conceptual problems of judging, in any objective way, the success or sufficiency of an environmental protection regime. Poland's predominantly negative experiences with environmental protection under socialism cannot tell us what combination of political, economic and legal institutions would ensure *sufficient* environmental quality. At best, they imply that certain institutions (or types of institutions) may be *necessary* because without them environmental protection is likely (if not certain) to fail. In §8.4–8.6, I outline three institutions that Poland's case suggests are necessary (though not sufficient) for minimally effective environmental protection: (1) a property rights structure that minimizes regulatory conflicts of interest by disaggregating the interests of polluters and government regulators; (2) a pricing mechanism that values resource scarcity, thereby inducing economic actors to conserve;

and (3) an institutionalized rule of law ideology that supports environmental regulations. Finally, the book concludes in §8.7 with an assessment of prospects for an environmentally friendly socialism in light of these institutional prerequisites.

8.2. Extrapolating from the Polish Case

Drawing normative conclusions from a single-country case study is presumptuous, but maybe warranted *if* the case is fairly representative. The systemic failure of environmental protection in People's Poland *was* fairly representative of the Soviet bloc as a whole. The Soviet Union and its Central and East European satellites shared common ideological commitments and political-economic structures; their histories of environmental regulation, while not identical, were roughly similar, and none had even minimal success in protecting the environment.¹ This work's systemic analysis of environmental protection in People's Poland would broadly fit any of the other former Soviet bloc countries (compare DeBardeleben 1985; Goldman 1972a; Ziegler 1987; Jancar 1987). There were, of course, differences in culture, history and institutions that undoubtedly had significance for environmental protection; the Communist countries of Central and Eastern Europe were not nearly homogeneous. But even their differences tend to justify extrapolating from the Polish case.

As noted in the Introduction, People's Poland combined a relatively weak version of Soviet-style communism with Eastern Europe's most well-developed system of environmental protection. This should make Poland the best case for assessing the failure of environmental protection under socialism. If environmental protection failed for systemic reasons in People's Poland, those same reasons must substantially explain the failure of environmental protection in other former Soviet bloc countries.

8.3. The Ambiguous Goal of 'Effective' Environmental Protection

The normative prescriptions offered in this chapter are intended to stand as political-economic prerequisites for effective environmental protection *anywhere*. But that raises an important preliminary question: What constitutes 'effective' environmental protection? A facile answer is that an environmental protection regime is 'effective' if it achieves its stated goals. But on that test, any country could ensure 'effective' environmental protection simply by setting its goals low enough.² To have any real utility, the measure of effectiveness must refer not only to the attainment but also to the sufficiency of environmental protection goals. The question then becomes: What constitutes sufficient environmental quality? As I have written elsewhere (Cole 1995b, 319; 1995c, 296), that question has no objective answer. There is no scientific or social consensus on what constitutes

sufficient or adequate environmental quality; we may not even know it when we see it. Still, there does seem to be *some* fact of the matter concerning environmental protection; at least, we seem to recognize when it is not effective enough.

Environmental protection in People's Poland may have been an objective failure, that is, a failure by any standards. But determining objective success seems a much trickier (if not impossible) task. Take the United States, for example. It is easy to argue that American environmental regulations have been comparatively successful; there is nothing at all controversial in asserting, at least, that they have been far more successful than environmental regulations in the former Soviet bloc. But to say they have been objectively successful—implying the achievement of a clearly sufficient level of environmental quality—is another matter. Critics from all points on the political spectrum blast away at real or perceived failings of American environmental policy: environmental rules are too stringent or not stringent enough; insufficiently enforced or overly enforced; not cost effective or too constrained by economic considerations. *Objective* success cannot be claimed except, again, in the lesser sense that subjectively determined goals have been achieved.

Because the quest for an objective measure of environmental success seems fruitless, this chapter focuses on what is realistically determinable: minimal and comparative effectiveness in environmental protection. With respect to these measures, the negative lessons from People's Poland have something to teach us; they may even show how programs that already are minimally or substantially effective can be improved. Still, we need to be cautious in drawing inferences from Poland's case. Specifically, we must distinguish inferences that are supported by Poland's experiences from those that are merely permitted or not contradicted by them.³

Finally, I do not claim that the institutional prerequisites discussed in this chapter are enough to ensure even minimally effective environmental protection. It is perfectly conceivable that a country might institute all of the prescriptions discussed here but still fail to protect its environment because of a lack of political will, insufficient finances, or both. It makes more sense, I think, to view the institutional suggestions in this chapter as means of avoiding known pitfalls for environmental protection. Efforts to protect the environment are *more likely to be effective*—or, stated even more cautiously, *less likely to be ineffective*—in countries that guard against regulatory conflicts of interest, adopt pricing mechanisms that account for relative resource scarcity and establish the rule of environmental law over politics.

8.4. Property Rights and Regulatory Conflicts of Interest

In Chapter 5 (§5.5), we saw how regulatory conflicts of interest hampered environmental law enforcement in People's Poland. The Party/state, as owner of the

means of production, subverted the regulations it promulgated and was obliged, as regulator, to enforce. This same conflict of interest persists to greater or lesser extents in all countries, but it can be minimized by (1) privatizing polluters and resource users, (2) decentralizing environmental law enforcement powers, and (3) disseminating environmental information among government agencies, non-governmental organizations and the public at large.

The Utility of Adversity: Private Polluters and Public Regulators

As we saw in Chapter 5, Poland's regulatory conflict of interest stemmed from the Party/state's ownership of the very enterprises against which it was supposed to enforce environmental regulations. The predictable result was lax to non-existent enforcement. Intuitively, this problem should be soluble by privatizing regulated industries.

When the state privatizes the means of production, it gives up its *direct* financial stake in their economic performance. It retains an *indirect* interest, of course, to the extent it relies on tax revenues and economic growth. But in a private economy, the state is not primarily responsible for, or substantially affected by, the individual performance of each and every firm. And it does not participate directly in the economic risks imposed on those firms by its environmental regulations. All other things being equal, the government should be more willing and better able to enforce those regulations.

Privatization of the means of production, as a method of improving environmental law enforcement, is also supported by János Kornai's theory of budget constraints (discussed in Chapter 5, §5.5). Soft budget constraints were endemic to the socialist economic system; enterprise survival depended not on profits earned in the market but on gross material output and political criteria, such as employment levels. The central administration allocated resources and rewards for *maximal*, rather than efficient, production. This rendered enterprises oblivious to price signals—including environmental fees and fines—that otherwise might have induced them to conserve resources and reduce pollution emissions. Kornai's theory implies that privatization and marketization should substantially harden budget constraints. Privatized firms operating in competitive markets must attend to costs and profits. They naturally will incline to eliminate productive inefficiencies. And they should be sensitive to price signals, including environmental charges; any firm that ignores them should find itself at a competitive disadvantage. Of course, states can (and sometimes do) soften budget constraints on private firms (the prime American example being the bail-out of Chrysler in the 1970s), but budget constraints are, without exception, harder in market economies than in administered economies. This was confirmed in Chapter 7, where we saw that budget constraints have hardened in Poland's transitional economy thanks to privatization (mainly from below) and the establishment of competitive markets.

Privatization and marketization also have contributed to the improvement of environmental regulation in post-Communist Poland. Under socialism, enterprises were, for all practical purposes, government agencies. As such, they participated in developing and implementing government environmental policy, with the predictable result that environmental regulations tended to be lax, ambiguous and poorly enforced. In post-Communist Poland, firms no longer are agents of the government, and their influence over environmental policy has waned. This is not to say that firms in market democracies do not influence government policy, but their influence is comparatively slight primarily because they are subject to greater political and economic competition. We saw evidence of this in Chapter 7 (§7.4), when industrial concerns in post-Communist Poland tried to roll back environmental fee increases. They were successfully opposed by a unique (in Poland's experience) aggregation of environmentalists, private firms and state-owned enterprises. Companies that had already invested heavily in environmental protection (in order to reduce their exposure to regulatory costs) naturally objected to fee reductions that would have devalued their investments, while providing a significant market advantage to competitors that had done nothing to reduce pollution emissions. The institution of competitive markets thus has served to disaggregate industrial interests, so that Polish industry no longer presents a united front on (or against) environmental policy.

Privatize Economic Producers and Resource Users, but Not Necessarily Natural Resources

In the United States, economists known as 'free market environmentalists' have argued that the environmental failure of socialism proves that natural assets (including commodities such as oil and non-commodity resources such as air) would benefit from privatization (see, e.g., Stroup and Goodman 1992, 427). They claim that forests, parks, wilderness areas and other resources currently under public ownership (in the United States as well as in the former socialist countries of Central and Eastern Europe) would be better cared for under private (more specifically individual or corporate) ownership and management. This argument may or may not have merit, but the history of environmental protection in People's Poland does not support it.

The Polish Party/state owned and managed all natural resources, including nature reserves and national parks, but without suffering the same regulatory conflicts of interest that were endemic to Party/state ownership of economic producers and resource users.⁴ To be sure, some Party/state-owned resources were mismanaged and damaged, especially those located in fallout areas for industrial pollution. But, as we saw in Chapter 1 (§1.5), many national parks and nature reserves, especially those located in the northeastern part of the country, were not substantially damaged by pollution or ruthlessly (over)exploited for

their development potential. Today, Poland's national parks and nature reserves include some of the most pristine places left in all of Europe. The Organization for Economic Co-operation and Development (1995, 88), an organization not known for its socialist leanings, recently concluded that '*[t]he environmental legacy of central planning in Poland is not all negative. . . .* In 1991, while 11 percent of Poland was considered to be "severely environmentally threatened," 27 percent was in natural or close to natural state' (emphasis in original). The Polish environmental economist, Tomasz Żylicz (1995a, 64–5), explains:

because the communist industrialization concentrated in areas of traditionally high intensity of production, vast regions remained largely underdeveloped. These regions and their almost intact natural capital represent an asset which is becoming increasingly scarce in Europe . . . about 8.5 percent of the area of the country remains relatively unscathed by development. Commercial forests and farms operating within sustainable and ecologically accepted principles include about 19 percent of Polish territory. Hence over a fourth of Poland represents an asset that many areas of Europe no longer have.

Although Poland's experiences do not support the claim that public (or state) ownership of natural resources per se creates regulatory problems, it does support lesser claims about regulatory problems that can result from ambiguous and inconsistent resource management policies. When a state lodges control of resources (such as national forests) in a single agency or ministry, with instructions to administer the resource for 'multiple uses' (including mining, timber, wildlife, recreation) that are not compatible, or for multiple values (including environmental, aesthetic, economic) that are incommensurable,⁵ administrative problems are bound to arise (see Blumm 1994). Indeed, the free market environmentalist literature is filled with horror stories of regulatory mismanagement resulting from 'multiple use' mandates (see Anderson and Leal 1991). But when state-owned resources are subject to clear and consistent management policies, administrative problems are unusual. One rarely reads about government mismanagement in publicly owned wilderness areas, for example, where preservation mandates are not compromised by development mandates.⁶ This is because the agencies responsible for wilderness areas operate under clear and consistent rules that only infrequently generate internal administrative conflicts.

This is not to say that 'multiple use' management is inherently bad policy; it may even be the best policy for resources amenable to various productive and non-productive uses. The real problem may lie in its implementation. In the United States, as well as in Poland, multiple use management responsibilities traditionally reside in a single government agency.⁷ This creates an internal administrative conflict as the agency seeks to promote economic development and environmental protection at the same time. Production mandates tend to overwhelm environmental protection mandates, especially when the agency's budget

depends on revenues generated by its development decisions. This is not the place to speculate about solutions to the administrative problems of 'multiple use' management, but one implication may be that management responsibilities should be split between two or more agencies, each with a singular productive or protective mandate. One clear advantage of this is that the budget for the agency with protective responsibilities would not depend upon development decision making (as is currently the case, for instance, in the US Forest Service). The idea of reducing mismanagement through segregating protection and development responsibilities has not been lost on free market environmentalists. It is implicit, for example, in Richard Stroup and John Baden's (1982) suggestion that the government appoint a wilderness endowment board, with a single narrowly defined mission to protect and enhance environmental values of unique environmental assets, such as wilderness areas. However, this solution leaves open the question of how inter-agency management disputes would be resolved. It may be that regulatory conflicts of interest and resulting inefficiencies are simply among the costs unavoidably entailed by the selection of a multiple use management regime. If those costs are unacceptably high, then multiple use must be forsaken for some form of dominant or singular use regime. In this context, it should be noted that privatization would, for all practical purposes, constitute a shift from multiple use management to dominant private use management; only the preferences of a private owner, rather than government bureaucrats, would determine the dominant use.

Free market environmentalists suggest that mismanagement of multiple use resources is inevitable under state ownership because bureaucrats are motivated not to maximize social welfare, but only to maximize their own power and resources (see Anderson and Leal 1991, esp. ch. 5). On the other hand, it would strain credulity to suppose that private owners might actively manage natural resources for their non-economic values after investing large sums of money to acquire them. But let us assume for the sake of argument that they might. We would still be left with the question of *how* to privatize state-owned resources. To free market environmentalists, the answer is easy: sell them to the highest bidders.⁸ But as with all allocation methods, this market-based approach creates winners and losers, which means that it is bound to be politically controversial. Consequently, the selection of a privatization method is no simple matter. History, both in Poland and in the United States, bears this out.

In Poland, privatization (of the means of production) has been an integral component of the transition to market democracy. However, as discussed in Chapter 7 (§7.4), privatization (from above) in Poland took a long time to get off the ground, and has progressed very slowly because of constant political disputes about the state's proper role in the economy and the appropriate privatization mechanisms, as well as allegations of corruption. By the end of 1994, privatization had virtually ground to a halt, with several thousand large enterprises still under state ownership. Is there any reason to expect that Poland (or the United States for that matter) could privatize national parks and other resources without encountering similar difficulties?

The history of resource privatization in the United States hardly provides more hope for efficient privatization. The US government has been in the business of privatizing natural resources virtually since its inception. Sometimes it has sold land and other resources to the highest bidders. But on many occasions it has allocated resources according to non-market (i.e., political and administrative) criteria. Following the Revolutionary War, for example, Congress ‘forsook the profit motive when it rewarded Revolutionary War veterans and refugees with bounty warrants or scrip entitling them to select lands from the Military Reserves in Ohio’ (Coggins et al. 1993, 56). Throughout the nineteenth century, federal homesteading laws, such as the 1862 Homestead Act (43 U.S.C. §§161 et seq., repealed in 1976, 43 U.S.C. §§1701 et seq.), gave away millions of acres of land for nothing or next to it. The robber-barons of the same era did not pay market value for their railroad land grants; the allocation mechanism in their case is best described as cronyism.⁹ To this day, the federal government gives away valuable mineral resources for only the tiniest fraction of their market value;¹⁰ it leases public land for grazing at below-market prices (see Wilkinson 1992, 81); and it sells timber from some (but not all) National Forests at prices that do not even cover the costs of administering the program (see Repetto 1988). In each of these cases, the federal government allocates property rights on political, rather than market, criteria. Those who criticize these programs for being inefficient often miss this important point: they are not designed to be efficient. To the extent that the Forest Service engages in below-cost timber sales for example, at least part of its express purpose is to *subsidize* communities that rely on the timber industry for their economic survival (see Repetto 1988, 373–6). Thus, below-cost timber sales (and many other non-market allocations of publicly owned resources) are just another vehicle of government largess, like welfare, school lunch programs, tobacco subsidies and tax deductions for charitable donations. One can, of course, disagree with the policy of subsidizing discrete groups with allocations of public resources, but then that changes the argument from whether government management unavoidably is inefficient to whether government management *should* (or should always) be efficient (on some definition of the term ‘efficient’). Free market environmentalists implicitly argue that resource management should always be efficient, but should efficiency be the only, or even the predominant, goal in all cases? As Colin Clark (1973a, 1973b) has shown, ‘efficient’ resource management can sometimes lead to resource extinction. Specifically, where discount rates are high, growth rates are low, and available substitute investments offer higher rates of return, the ‘efficient’ management decision may be to use up or extinguish the resource. Clark’s study concerned blue whale populations, and he concluded that ‘extermination of the entire population may appear as the most attractive policy, even to an individual resource owner.’ Thus, the assumption that individual owners will always conserve resources does not hold in economic theory, let alone in practice (consider, as an empirical example, the Oklahoma ‘dustbowl’). Privatization, the profit motive and ‘efficient’ management do not guarantee resource conservation any more than public ownership guarantees resource depletion and despoilation.

Even if economic efficiency were taken as a proxy for proper resource management *and* private ownership was found to be more efficient than public ownership, that still might not justify the privatization decision in all cases. Privatization itself can be costly, and those costs need to be factored in before determining the relative merits of private versus public ownership of natural resources in individual cases. As we have seen, governments do not act solely (and sometimes not at all) from economic motives; politics, justice and morality always are factors. When a government decides to privatize publicly owned resources, it has a variety of allocation mechanisms to choose from and it does not always select a market-like competitive bidding process. Different allocation mechanisms lead to different allocations, favoring different economic and political interests. So we certainly should expect those interests to lobby, before the fact of privatization, for the allocation method(s) they prefer. We could not reasonably expect, then, that Poland, the United States or any other democratic country would be able to privatize natural resources without running into exactly the same kind of *costly* political squabbles that have plagued Poland's efforts to privatize its means of production. Supporters of privatization of publicly owned natural resources have not adequately assessed the likely costs (economic and non-economic) of privatization arising from alternative allocation mechanisms. Terry Anderson and Donald Leal (1991, 167) concede that '[p]roperty rights are costly to define and enforce.' Yet they have not attempted to estimate the cost of privatization.¹¹ Without that information, how are we to conclude, as a matter of reason rather than mere faith, that the outcome would be more efficient than under the status quo of public ownership and management? After all, '[i]t is possible to create a system which is so costly to implement that it overwhelms the benefits to be gained from control' (Hanna, Folke, and Máler 1995, 18; also see Runge 1984).

Regulating the Regulators: Public Participation in Environmental Policy Making and Enforcement

When the state suffers from a regulatory conflict of interest, as People's Poland did, environmental law enforcement is likely to suffer unless enforcement power is decentralized. Some independent agent(s) must be empowered to enforce the environmental laws against polluters and against the state itself. In People's Poland, as we learned in Chapter 3 (§3.5), private citizens and environmental groups had little authority to enforce environmental laws against polluters, and none at all to enforce them against the Party/government. But in most advanced market democracies, legislatures have decentralized regulatory power, for example by authorizing so-called 'citizen suits.' A typical provision is found in §304 of the American Clean Air Act (42 U.S.C. §7604(a)), which authorizes 'any person' (broadly defined) to bring a civil action in federal district court against (1) the United States government or its agencies for violating emissions standards or

administrative orders, (2) government administrators for failing to perform non-discretionary duties under the Act, and (3) any person (again broadly defined) who is polluting without a permit or is in violation of permit conditions.¹² The citizen suit has proven to be a powerful tool for the private enforcement of public law. Individual citizens and environmental groups have sued polluters to enforce compliance with regulatory standards, and government administrators for failing to perform non-discretionary statutory duties (see Miller 1987; Boyer and Meidinger 1985). Citizen suits have also thwarted sporadic efforts to undermine federal law enforcement, as in 1981 and 1982, when the Reagan administration slashed the budget of the Environmental Protection Agency (EPA). Those budget cuts forced the agency to reduce its staff of enforcement attorneys from 200 to 30 (Feller 1983, 554), greatly reducing its ability to identify, monitor and prosecute non-complying polluters. The number of EPA enforcement actions under the Clean Water Act, for example, fell from 184 in 1979 to just 47 in 1982 (Naysnerski and Tietenberg 1992, 114). Individual citizens and environmental organizations filled the void, however, taking on the role of private attorneys-general to enforce the federal environmental laws. Between 1970 and 1978, when governmental enforcement of environmental laws was robust, a total of only 25 citizen suits were filed; after the Reagan budget cuts decimated the agency's enforcement capabilities, the number of citizen suits exploded, from 41 in 1982 to 266 in 1986 (Naysnerski and Tietenberg 1992, 114).

Today, in post-Communist Poland, citizens and environmental organizations have greater authority to enforce environmental laws than they had under communism (see §7.5). Indeed, they may have even more power than environmental NGOs in other European *Rechtsstaats*, including Germany. But that still may not be enough. As Susan Rose-Ackerman (1995) has shown in her admirable book comparing environmental law in Germany and the United States, German citizens and environmental organizations have relatively little legal leverage over regulators. Unlike their American counterparts, for example, German environmentalists cannot force government regulators to comply with non-discretionary statutory mandates. If a German administrator fails to promulgate an emissions standard as required by a certain statute, private citizens have no administrative or judicial recourse. This lack of public access to environmental policy making and enforcement in Germany led Professor Rose-Ackerman to conclude, rightly in my view, that the American approach is 'more conducive to good policy and is more democratically legitimate' (Rose-Ackerman 1995, 66). This is not to say that the German system of environmental protection has been ineffective, or even that it has been *less* effective than the American system.¹³ However, to the extent that the American system permits citizens to more closely *regulate the regulators*, we might say that it is *more likely* to be effective (or less likely to prove ineffective) over the long run. Certainly, Poland would be better off following the American rather than the German model, given its history of regulatory conflicts of interest and the still slow pace of privatization, which is likely to keep thousands of enterprises under state ownership and control for years to come.

Access to Environmental Information

Regardless of which model Poland chooses, its citizens will not be in a position to exercise their legal rights unless they have access to useful information about environmental conditions, regulatory standards and violations (see Futrell 1993, 90). The collection and dissemination of environmental information is a prerequisite to effective environmental law enforcement, whether the enforcer is a state agency, an NGO or an individual citizen. This lesson is clear from Chapter 4's (§4.5) discussion of the effects of state censorship on the flow of environmental information and environmental law enforcement.

In People's Poland, the public was woefully underinformed about general environmental conditions and polluting activities. There were several reasons for this, the first being inadequate information collection. Poland's system of environmental monitoring and information collection may have been better developed than those of other Soviet bloc countries, but it was not nearly adequate. As noted in Chapter 4 (§4.4), environmental inspectors were poorly trained and equipped; monitoring procedures were haphazard; monitoring equipment was substandard and not uniformly calibrated. Most environmental information came from the polluters themselves, and it was every bit as reliable as the economic information they supplied to socioeconomic planners—which is to say, completely unreliable. Poles could, of course, collect a certain amount of useful environmental information with their own senses; it was relatively easy to smell a poisoned stretch of river. Even then, efforts to identify and prosecute those responsible often were hampered by the incompetence of Party/state investigators.

Poor environmental monitoring and reporting in People's Poland was a combined consequence of technological, political and economic factors. First and foremost, environmental monitoring requires sophisticated equipment and well-trained personnel, both of which cost money. But in People's Poland, funds were always in short supply (especially for environmental protection purposes). In post-Communist Poland, environmental funding problems have been alleviated by international assistance and a larger domestic environmental protection budget (afforded by increased collections of environmental fees and fines, resulting primarily from hardened budget constraints). And the environmental information obtained from monitoring today is more reliable because a larger percentage of it comes from state monitoring, rather than enterprise self-monitoring.

One environmental information problem persists, however, in post-Communist Poland: censorship. In the socialist era, the Party/state regularly censored environmental information under state secret laws. As we saw in Chapter 4 (§4.5), this was chiefly a consequence of the Party/state's regulatory conflict of interest as owner and regulator of polluting enterprises; the Party/state had a direct financial stake in avoiding environmental law enforcement against the enterprises it owned and controlled. The solution to that problem, as already noted, is to structure property rights so that the interests of polluters and government

regulators are dis-aggregated, for example by privatizing resource users. But privatization and marketization in post-Communist Poland have not, so far, led to increased public access to environmental information. On the contrary, public access actually has been reduced in some respects. Information about individual polluters, which the Party/state used to publish regularly, today is embargoed out of professed concern for privacy and trade secrets (see *Polish News Bulletin*, Dec. 23, 1992). To make matters worse, in 1994 the Polish government (dominated by former Communists and their allies from the Peasant Party) proposed a sweeping new censorship law, specifying 71 ambiguously worded categories of state secrets, including:

Materials of the Council of Ministers concerning the appraisal of the strategic potential of the state and strategic government orders and their implementation;

Research and development projects of particular importance to the economic interest of the state, ordered by supreme state authorities;

Information concerning technical, technological, and organizational arrangements whose disclosure could jeopardize important economic interests of the state. (Quoted in *Polish News Bulletin*, Sept. 16, 1994)

Any of these ‘bottomless pits’ could easily have swallowed most environmental information. Under the draft law, bureaucrats would have had unfettered discretion to decide what information should be kept secret; the draft law contained no provision for judicial review. Anyone found guilty of publicizing censored information would have faced imprisonment for up to ten years (*Polish News Bulletin*, Sept. 16, 1994). According to the Helsinki Human Rights Foundation, this draft law was even more restrictive than the old censorship law dating from the period of Martial Law (*Polish News Bulletin*, Sept. 21, 1994).¹⁴ Not surprisingly, Polish journalists, members of the pro-reform opposition in parliament, and the Solidarity trade union rabidly opposed the bill. But Poland’s ruling coalition defended it on grounds reflecting habitual ways of thinking. Then-*Sejm* Speaker (later Prime Minister) Józef Oleksy stated that the law was necessary because the media’s ‘disavowal of Parliament has damaged the public imagination concerning the dignity of this institution’ (quoted in *PAP News Wire*, Sept. 22, 1994). Another legislator, Jerzy Dziewulski, defended the law by stating, ‘[y]ou journalists can’t have greater rights than the police’ (quoted in *New York Times*, Sept. 18, 1994). The lower house of parliament (the *Sejm*) approved the law on September 15, 1994 (*Polish News Bulletin*, Sept. 16, 1994). President Lech Wałęsa threatened to veto the bill, but it never reached his desk. The weight of public opinion led the upper house of the parliament to reject the bill almost unanimously on October 7, 1994; the vote was 74 to 5 (*Reuters*, Oct. 7, 1994). Subsequently, the leader of the former-Communist forces that had introduced the legislation, Aleksander Kwaśniewski (now president of Poland), did a complete about-face and announced that his Party would no longer support the measure (*Business News from Poland*, Oct. 14, 1994).

Polish environmentalists, meanwhile, have been working in the opposite direction to increase public access to environmental information. The Wrocław-based Polish Environmental Law Association, under contract with the Ministry of Environmental Protection, Natural Resources and Forestry, recently drafted a new comprehensive environmental protection law that would (among other things) prohibit the censorship of, and guarantee citizens access to, virtually all environmental information. Unfortunately, given the current composition of the *Sejm*, this draft law's chances for parliamentary approval are rather slim. But in view of the need to *regulate the regulators*, some kind of Freedom of Environmental Information Act (with appropriate limitations for legitimate trade secrets, etc.) certainly would enhance environmental law enforcement.

8.5. Valuing Scarcity

The lack of scarcity pricing was a systemic problem for environmental protection under Marxist socialism. Throughout most of the history of People's Poland, land, air and water were provided to economic users virtually free of charge. As we saw in Chapter 6, this policy was ideologically motivated. According to Marx's labor theory of value, natural resources had *use* value but no *real* economic value because they were not products of human labor; to price them, as capitalist economies did, was mere commodity 'fetishism.' It was only in the mid-1970s that the Polish Party/state began to deviate from Marx's labor theory. First, the 1974 Water Law imposed a nominal charge on water use (consumption and pollution). Then the 1980 Environmental Protection and Development Act introduced a price schedule for most economic uses of most natural resources. These charges were intended to induce resource conservation among economic users, but they failed to significantly affect the rate of resource use and pollution for several reasons. The fees were not based on supply (relative scarcity), demand and the marginal costs of development. Consequently, it was impossible to determine how much (if any) conservation a given price would yield. The Party/state was shooting blindfolded at rapidly moving targets. To the extent environmental fees successfully induced any conservation at all, it was sheer luck. Even then, the impacts were blunted by endemic soft budget constraints. As we saw in Chapter 5, price increases routinely were offset by subsidies for resource users. This relates back, of course, to the Party/state's conflict of interest as environmental regulator and owner of resource users/polluters. Resolving that conflict (by privatizing the means of production and hardening budget constraints) is a prerequisite to instituting effective scarcity pricing.

Since competitive markets and (relatively) hard budget constraints have been introduced in post-Communist Poland, scarcity pricing of resources has become a more effective means of inducing conservation and pollution control. Fees for using and polluting natural resources have increased—in some cases by a factor

of ten (see Table 7.3 in Chapter 7). And those charges are on top of market prices for commodity resources, such as coal and oil, that have risen in some cases by more than 1,000 percent since 1989 (see Czaja et al. 1994, 27). Firms (including state-owned enterprises) have responded by reducing resource use (per unit of production) and, consequently, pollution emissions (see Table 7.1 in Chapter 7). This constitutes a *structural* improvement in environmental protection resulting from a combination of policy instruments—in this case, increased environmental charges—and systemic changes—the introduction of competitive markets, harder budget constraints and scarcity pricing.

This is not to say that scarcity pricing alone can ensure *sufficient* environmental quality. It never has. No country's resource charges even approximate the (estimated) social cost level. Tomasz Żylicz (1993a, 37) has written that Poland's resource-use and pollution charges, which already are among the world's highest, would have to be increased by a factor of eight to come close to the social cost level. And his estimate did not even attempt to quantify and incorporate non-economic values, which arguably must be included to identify the appropriate scale of environmental charges at varying rates of resource supply and demand.¹⁵ For reasons specified in the concluding section of Chapter 7, it would be *politically* unfeasible for the Polish government to raise already high resource prices to social cost levels. And as an economic matter it would price most (if not all) Polish resource-based products out of world markets since other countries do *not* price their resources accordingly.

Another issue related to scarcity pricing concerns the national income accounting system which countries use to quantify national income and production (GDP). As we saw in Chapter 5 (§5.3), the socialist economies regularly outpaced the Western capitalist economies in economic growth, at least (and probably only) on paper. However, their costs of producing growth were far higher. The socialist economies produced growth *extensively*, that is, by maximizing resource inputs. This resulted in relatively and absolutely high rates of resource depletion and pollution emissions. But because resource depletion, pollution emissions and attendant damage were not counted as costs to the economy (let alone to Polish nature, society and culture), they had no *statistical* effect on national income (although they inevitably had a *real* effect). Poland's economic growth statistics were artificially inflated by the intentional exclusion of real environmental costs, so much so that the recorded increases in national income likely masked *real* decreases in welfare.¹⁶ The problem of accounting for resource depletion and environmental damage also plagues capitalist economies, but to a lesser extent. In the United States, for example, the national income accounts exclude the *real* costs of environmental degradation and resource depletion mainly because of computational difficulties (see Cairncross 1995, 106). As a result, pollution damage generates *statistical* growth, while inflicting *real* costs on the economy. For example, when people become sick from air pollution, that contributes to production in the health care industry; and it further contributes to GNP by creating problems for envi-

ronmental industries to clean up. From the perverse perspective of the national income accounts, more pollution is better than less. This result is ameliorated, however, in market economies by the institution of scarcity pricing. Even though scarcity is not factored into the national income accounts, it is reflected in the prices firms must pay to acquire resources. As resource inputs grow increasingly scarce over time, the price for those inputs rises, and firms in competitive markets respond by, among other things, increasing factor productivity (i.e., the amount of production squeezed out of each input). Consequently, rates of resource consumption and pollution decline (on a per unit basis), regardless of the fact that those trends do not (directly) enhance GDP growth.

The failure to incorporate the costs of environmental degradation and resource depletion in computations of national income nevertheless skews perceptions of the costs and benefits of environmental protection, often making environmental measures appear more costly than they really are. This plays into the hands of critics of environmental policy, who point to slower GDP growth as ‘proof’ that regulations are too costly. For instance, in 1991, a Harvard economist reportedly told a tax policy group that environmental regulations would cost the American economy 3 percent of GNP annually by the year 2005, mainly by consuming capital stock that otherwise could be invested in ‘productive’ activities (*Bureau of National Affairs Daily Report for Executives*, Sept. 13, 1991). But this says less about the social costs and benefits of environmental policy than it does about how GNP is computed. It certainly cannot be taken as proof that environmental regulations create a net loss in social welfare because, again, GNP is not a proxy for social welfare.¹⁷ Fortunately, the United Nations, the OECD and individual countries are working on methods for incorporating environmental costs and benefits into the national income accounts (see, e.g., Prince 1993). Those efforts will, it is hoped, lead to more accurate assessments of the costs and benefits of environmental protection, giving sorely needed content to the, as yet, vacuous slogan ‘sustainable development’ (see Cole 1996).

8.6. The Rule of (Environmental) Law

For environmental protection to be effective, environmental laws must be both enforceable and actually enforced (on this distinction see Chapter 3, §3.1). Above all, this means that environmental regulations must have the force of law; they cannot be subordinated to political expediency or the arbitrary power of government officials, bureaucrats or industrial managers, as was the case in People’s Poland (see Kozłowski 1993, 152). Although this may seem obviously true, it raises two significant questions. First, *can* environmental law enforcement be insulated from political and economic expediency? This question, at bottom, concerns the meaning and utility of the rule of law concept. Second, assuming environmental law enforcement can be insulated from political and economic expediency, to what

extent *should* it be? This question implicitly recognizes that law enforceability and enforcement are variable, and asks what level of each is required for (minimally) effective environmental protection.

The Rule of Law: Fact, Myth and Aspiration

The normative assertion that environmental law *should* rule over politics entails a commitment to the rule of law concept. This commitment requires elaboration because, for reasons that are difficult to fathom (especially in light of analysis from Chapter 4), the rule of law concept remains stubbornly controversial.¹⁸ Much of the controversy, however, stems from ideological commitments that obstruct a realistic assessment of its utility and, perhaps, necessity as an organizing principle for democratic society. The rule of law is valuable *not* because it is some magical neutral principle that solves all political and economic conflicts justly and efficiently, but simply because there is no acceptable alternative. If not the rule of law, then the rule of what or, more appropriately, of whom? A good Marxian (or, as likely these days, a post-modernist, radical libertarian or anarcho-capitalist) might respond that this question presents a false choice because the rule of law itself is only a myth concocted to mask the rule of the capitalist class (or the rule of special interests); the only real choice is between contending persons or parties (see, e.g., Cain and Hunt 1979, ix–xi). There is some truth in this radical critique of the rule of law, but it is not the whole truth. The rule of law is not *just* a myth; there is some fact of the matter.¹⁹ But to understand that fact-of-the-matter, we need to have a clear idea of what the rule of law concept concerns and what it does not concern.

First, we must distinguish between the rule of law and legal rules. The rule of law does *not* entail a belief that legal rules are neutral, apolitical or even just. In fact, the rule of law does not imply much of anything about the normative content of the laws; as H. L. A. Hart (1961, 157) has pointed out, a general rule of equal application can be quite compatible with unjust legal rules. The history of the rule of law concept extends to sixth-century BCE Athens, when Solon gave the people ‘equal laws for the noble and the base,’ which provided ‘not so much control of public policy as the certainty of being government legally in accordance with known rules’ (Hayek 1975, 7–8).²⁰ Like the Greek concept of *eunomia* (but unlike *isonomia*, which provides for substantial political equality), the modern rule of law specifies little if anything about the normative content of laws, but only the relationship between those laws, power and politics. The French political theorist Blandine Kriegel (1995, 63) has summed up that relationship this way:

politics becomes an object of law, and political rights are juridified, just as individual rights are. The deviation from Roman Law is clear: no longer is the division of things law’s sole object but rather constraints on power and limitations

on human uses of things and of other human beings. Law is no longer the coin of a politics of strength, and force and power are no longer to be regarded as brute facts. They are all henceforth subjected to law, while law itself becomes a power, a force. The state adopts the rule of law. To make politics an object of law is impossible without the subjection of power itself to the law, the juridification of proprietors as well as of property, of the powerful as well as of power.

The rule of law concept, thus, is a constraint (though not an absolute one) on political discretion (compare Raz 1979, 224). It entails an ethical injunction that the laws be consistently applied and enforced, without regard to parties, classes or personalities. And it is this implicit ethical commitment that distinguishes the rule of law, as a practical matter, from the arbitrary rule of persons or parties. It offers an *enforceable expectation* that the lawmakers and their favorites will be bound by the same rules that apply to others similarly situated;²¹ to the extent that this expectation is *not* enforceable, the state simply fails to adhere to the rule of law.

The enforceable expectation is what I take to be the fact-of-the-matter of the rule of law. It allows us to observe and even measure the extent to which laws are enforceable and actually enforced, including against the rulers themselves.²² There may be no bright line of enforceability and actual enforcement to distinguish societies that adhere to the rule of law from those that do not. But we can judge the extent to which societies are achieving (or failing to achieve) the (never completely attainable) rule of law goal. Most importantly, to the extent they fail, the problem is *not* that the rule of law concept is somehow flawed, but that the law does not rule enough. So when a state fails to live up to the rule of law, the solution is not to abandon the rule of law concept as a myth, but to demand greater adherence to it. And when a state's laws are unjust, the answer is not to abandon the rule of law, but to demand different, more just laws. As E. P. Thompson (1975, 266) put it in his famous passage from *Whigs and Hunters*:

[w]e ought to expose the shams and inequities which may be concealed beneath this law. But the rule of law itself, the imposing of effective inhibitions upon power and the defense of the citizen from power's all-intrusive claims, seems to me an unqualified human good.²³

Alexandr Zinoviev (1979, 574–5), among many others, specifies a second condition for the rule of law. In addition to requiring equality under the law, he argues that the rule of law invokes a principle of legality, according to which no one should be prosecuted for any act that has not previously been declared, by legitimate (i.e., legally prescribed) procedures, to be illegal. However, this requirement would appear to require the conclusion that the United States and the states of the British commonwealth are *not* rule of law states to the extent that their common law courts often declare what is illegal only upon passing judgment (see Denning 1949). But if there are any rule of law states existing in the world, the United

States, Canada, Britain, New Zealand and Australia surely are among them. We might conclude with Michael Oakeshott (1983, 155) that there *is* such a thing as the rule of law, but no existing states conform to it. But then we would be forced to adduce some new concept to explain the *very real* distinction between states where politics and power rule without constraint and states where politics and power have been substantially subordinated to the law. It hardly seems worth the trouble, especially when considering that the familiar rule of law concept is capable of serving as both the unattainable goal *and* the measure of relative attainment.

The Enforceability and Enforcement of Environmental Law

Even if a state generally adheres to the rule of law, its environmental laws may not be effective if they are either unenforceable or unenforced. To be enforceable, the laws must provide sufficiently unambiguous standards (or directions for setting standards), specify responsibilities and establish penalties for responsible parties who fail to comply with the standards or directives. Actual enforcement depends largely on factors outside of the laws themselves, most notably political will and state finances. However, as we saw earlier in this chapter (§8.4), legislation itself can affect prospects for actual enforcement. For instance, citizen suit provisions enhance actual enforcement as well as the enforceability of environmental laws by expanding the universe of agents authorized to enforce the laws and by providing rewards for their enforcement efforts. Such provisions increase the likelihood that the laws will be actually enforced. Their very inclusion within legislation is evidence of political will to enforce the laws.

As a normative matter, a law that is either unenforceable or not actually enforced might as well not exist.²⁴ On the other hand, something less than *perfect* enforceability and enforcement must be sufficient because, in the first place, perfection is unobtainable. In the second place, the rule of law demands not that laws be completely insulated from political considerations but that they be clear and generally applicable, regardless of the persons or parties involved. Third and finally, even if environmental laws *could* be insulated from practical political and economic considerations, they probably *should not* be. The purpose of environmental law, after all, is to solve (or resolve) problems that never are purely legal, but always combine social, political and economic considerations. Applying legal rules rigidly to such problems may not always yield the best results; some amount of flexibility is desirable for reasons of justice, efficiency and, in some cases, both. This is just Aristotle's familiar point about the need to temper law with equity in order to promote justice. But this does not indicate any fault in the law or with the legislator because the law, by its nature, must be general. And general legal rules cannot be expected to fit each case precisely (Aristotle 1941a, 1137^b9–37^b24). Aristotle's notion of equity is not irreconcilable with the rule of law. As Lawrence B. Solum (1994, 145) has written:

The practice of equity by a virtuous judge does not ignore the genuine importance of achieving regularity, publicity, and generality in the law. Fidelity to the letter of the law is part of the virtue of judicial integrity, but respect for legal rules is not the whole of judicial excellence. There are situations in which a judge with practical wisdom will perceive that adherence to the spirit of the law requires a departure from its letter. Sometimes justice *and the rule of law* require the practice of equity. (Emphasis added)

Having ruled out the desirability (indeed, the possibility) of either zero or perfect enforceability and enforcement, we must at least inquire (even if we cannot answer) what level of enforceability and enforcement is necessary for minimally effective environmental protection. Perhaps the only practical way is to assess the impacts the laws are having at existing levels of enforceability and enforcement. If they are not measurably improving environmental quality or avoiding environmental degradation, then current levels of enforceability and enforcement are insufficient. How much of an impact they *should* be having depends, to some extent, on each country's specific environmental, fiscal and policy circumstances. Any more abstract definition of *sufficient* enforceability and enforcement probably would be about as meaningful as the slogan 'sustainable development' in current usage—which is to say, not very meaningful.

In Chapter 3, I concluded that the environmental laws of People's Poland were sufficiently 'enforceable' (to the extent *any* laws subject to the Leninist doctrines of 'socialist democracy' and 'socialist legality' can be said to have been enforceable), excepting certain statutory provisions that failed to specify responsible parties, standards and/or penalties. Poland's Council of Ministers and various agencies with environmental protection responsibilities complied, for the most part, with the statutory directives by promulgating strict and clearly enforceable standards. The main problem in People's Poland, as pointed out in Chapters 4 and 5, was lax to non-existent enforcement. The Polish government failed to provide a sufficient level of law enforcement to ensure (minimally) effective environmental protection. In post-Communist Poland, most of the political, economic and ideological causes of lax enforcement have been reduced or eliminated. Consequently, as we saw in Chapter 7, environmental law enforcement has substantially improved since 1989.

This is not to say that Poland's environmental laws now are perfectly enforceable and enforced; that clearly is not the case. The most important issue, however, is whether Poland has achieved a *sufficient* level of enforceability and enforcement for effective environmental protection. The statistical improvements described in Chapter 7 at the very least suggest that Poland is moving in the right direction. Poland's environmental laws are now having a significant and measurable positive impact on pollution emissions and overall environmental quality.

Some Polish environmentalists complain that the environmental laws are still being sacrificed to political and economic expediency, pointing to the case

of Warsaw's Okęcie II airport. As we saw in Chapter 7 (§7.4), the airport was permitted to open in 1992, even though it was in violation of environmental rules that required the installation of environmental protection equipment *before* opening. The Chief Environmental Protection Inspector compromised by allowing the airport to open on the condition that airport authorities would retrofit all required environmental protection installations within 18 months. Environmentalists alleged that this compromise sacrificed the legal rules for the sake of political and economic interests. That is true to some extent; the law was not enforced to its last letter, and to the extent that this was for reasons of political and economic expediency, we might conclude that the rule of law was violated. But it is equally clear that the *purpose* of the legal rule ultimately was fulfilled. Environmental protection equipment was retrofitted at Okęcie II. And the importance of that can hardly be overemphasized. In the first place, the outcome of the case certainly would have been different under Communist Party rule; in People's Poland, the State Environmental Protection Inspectorate had *no* enforcement power, and the courts were unlikely (to say the least) to countermand a decision of Warsaw Party/city officials. Even more importantly, the Okęcie II case does *not* establish a precedent for future economic developments to avoid environmental protection requirements. On the contrary, it creates an incentive for them to comply in full from the start because it almost always is cheaper to design in environmental installations rather than retrofit them later. Had the developers of Okęcie II known before-the-fact that a court would order them to retrofit environmental equipment within 18 months after opening, they surely would have installed the necessary equipment in the first place. In the final analysis, environmental protection in Poland was improved as a result of the Okęcie II case.

The Eco-Totalitarian (Non-)Alternative

As we saw in Chapter 4 (§4.2), the Polish United Workers' Party ruled as a totalitarian regime, unconstrained by the rule of law. It is important to recognize, however, that this entailed no necessary implications for environmental protection. Operating according to the principles of socialist democracy, democratic centralism and the *nomenklatura* system, the Party theoretically could have asserted as much (or as little) control as it desired (or thought necessary) over any area of social concern, including environmental protection. And that control might have been exercised either positively or negatively; that is, the Party might have acted either to protect or destroy the natural environment. As we saw throughout Chapters 4 and 5, the Polish Communist Party maintained policies that resulted in less environmental protection than the law apparently required. But, in theory, it might have instituted policies providing *more* environmental protection than the law required. A totalitarian regime might, after all, be founded on an ecological ideology. Indeed, some writings of the ecology movement seem to promote a platonis-

tic (totalitarian) republic, ruled by ecologist-kings (rather than philosopher-kings) (see, e.g., Ophuls 1977, 159–63).

My purpose here obviously is not to condone eco-totalitarianism (or any other form of totalitarianism), but simply to make the point that totalitarianism is not *logically or theoretically* inconsistent with environmentalism or environmental protection. Conceivably such a society could attain quite high levels of environmental protection even in the absence of the rule of law, assuming those who govern have the will and the means to implement and enforce pro-environmental dictates. Indeed, at first glance it appears that eco-totalitarians should have an easier time implementing their environmental policies than democratic leaders, who always are constrained by political competition, public opinion and the potential fallout from unpopular policies. It should be far easier, for example, for a dictator to shut down polluting factories and institute draconian environmental protection measures. Theoretically, all the dictator needs is the political will (which is assumed in the case of an eco-totalitarian regime) and the public finances to implement and enforce the rule. The real world, of course, is more complicated than this. And there are reasons to doubt whether totalitarian regimes (or other states not adhering to the rule of law) could adequately protect their environments over long periods of time. First of all, totalitarian regimes are never fully insulated from political and economic pressures that could erode their commitment to ecological preservation. As Hannah Arendt (1973, 306) and others have pointed out, totalitarians typically seek to minimize opposition by cultivating mass support. This is amply demonstrated in the history of People's Poland, where every single leadership change was precipitated by public unrest.²⁵ So, an eco-totalitarian regime might be forced to compromise on its ecological values. Moreover, as a matter of practical economics, it is unrealistic to assume that a pro-ecological totalitarian steady-state would be able to produce enough revenue to enforce its environmental dictates against dissenters. Environmental protection, after all, is very expensive. In the absence of sufficient finance to support the state's coercive apparatus, ecologist-kings would be forced to rely on the inherently less reliable enforcement mechanisms of ideological, social and moral suasion.²⁶ From a political perspective, Roger Congleton (1992) argues that totalitarians are likely to produce less environmental protection than democratic regimes because they have uncertain career paths, shorter time horizons, relatively lower risk aversion and higher marginal costs of pollution control. But Congleton neglects the ideological dimension, which is crucial to understanding the politics of environmental protection, especially in an eco-totalitarian regime (see North 1984, 10). Nevertheless, an ideological commitment to environmental protection may not always prevail over other practical considerations for the totalitarian, such as maintenance of power.

There is growing empirical evidence that environmental protection tends to be more successful in democratic states. Indeed, the failure of environmental protection throughout the Communist world—in contrast to the, at least, modest suc-

cess of environmental regimes in the democratic states of Western Europe and North America—may provide the most compelling evidence to date. Even if we conclude cautiously that the environmental case for democracy remains undetermined, there are strong reasons (many of which are discussed in Payne 1995) for suspecting a positive correlation between democracy and ecology. First, environmental information is more readily accessed in democracies that guarantee free speech and freedom of the press, and this facilitates environmental education. Democratic states also permit and even encourage open debate about environmental problems and policies. And those debates can influence the state's environmental protection regime. However, such institutions are antithetical to totalitarianism. Given the weight (slight though it may be) of historical experience, combined with the sound theoretical reasons for expecting democracies to provide more environmental protection than less open forms of government, it appears doubtful that eco-totalitarianism would be a feasible, let alone preferable, alternative.

8.7. Is There a 'Capitalist Imperative' for Environmental Protection?

The various institutional prescriptions set forth in this chapter—from private property rights in the means of production to scarcity pricing and the rule of law—characterize advanced capitalist democracies. The analysis generally supports the claim, advanced by Martin Lewis (1992) among others (including Mikhail Bernstam 1991), that there is a 'capitalist imperative' for environmental protection. The argument is not that capitalism is environmentally benign, but that it provides an institutional framework within which environmental protection efforts can succeed. This may be true, but the argument proves too little.

Lewis shows only how capitalist institutions adjust to achieve environmental protection goals. But to prove the thesis of a capitalist 'imperative,' he must also show that *only* capitalist institutions are capable of making the necessary adjustments.²⁷ To that end, Lewis (1992, 163–6) points to the failure of environmental protection under real existing socialism. He is quite right about that failure, but wrong to suppose that it proves a 'capitalist imperative' for environmental protection. The environmental failure of real existing socialism hardly proves that environmental protection would not succeed under any and all conceivable socialisms; neither does the analysis in this book *prove* that. However, the failure of environmental protection under (real existing) socialism in Poland and throughout the ex-Communist world raises serious questions for Marxian, non-Marxian and post-Marxian advocates of socialism for environmental protection. The biggest question may be whether and how future socialist states might avoid the institutionally generated impediments to environmental protection that plagued earlier socialist states. More specifically, how might socialist property institutions and central planning be structured to avoid (in practice as well as in theory) the

regulatory conflicts of interest that hampered environmental protection efforts in previously existing socialist states? How might a non-market economy be structured to supply the kind of budget discipline needed to coerce resource users and polluters into conserving resources and limiting emissions? And, in the absence of competitive markets, how might future socialist societies spur technological innovations for environmental protection? Finally, who would be able to enforce the environmental laws against non-compliers if the state, as owner *and* regulator of the means of production, decided not to? These questions place a heavy burden on proponents of neo-, non- and post-Marxian eco-socialism. At the very least, it seems that an environmentally feasible socialism would have to be founded on principles and institutions quite different from those of the orthodox Marxist–Leninist model.

Notes

1. On the environmental problems of other former Communist countries of Central and Eastern Europe, see, among other works, Carter and Turnock (1993), Alcamo (1992), Peterson (1993), Feshbach and Friendly (1992), *National Geographic* (June 1991), Vavroušek (1990), Komarov ([pseud.], 1980), International Union for the Conservation of Nature (1990), French (1990), Goldman (1972a).

2. This was *not* the problem in People's Poland where environmental quality goals (in the form of ambient standards) were quite stringent. The problem in Poland was that no progress was made toward achieving them; in fact, Poland's environmental laws did not succeed even in stemming the progress of degradation.

3. The importance of this distinction is highlighted in the discussion of property rights in §8.4.

4. To be fair, I should point out that free market environmentalists are not particularly interested in improving *regulatory* enforcement. In addition to privatizing natural resources, they would deregulate environmental protection, leaving it to the workings of the free market and the common law (see, generally, Anderson and Leal 1991).

5. For an interesting discussion of incommensurability problems in environmental protection, see Sunstein (1993). Richard Epstein (1995) argues that incommensurability problems should not deter society from maintaining policies that maximize utility. But, as far as I am aware, no one has raised the incommensurability problem to promote the abandonment of utility maximization as a goal. The incommensurability problem really concerns the measurement of utility. How do we calculate utility (or welfare) given diverse factors that are evaluated in different terms or even different languages? How do we (or can we) measure the 'value' of endangered species or the 'cost' of their extinction in assessing policies that affect them? Do we simply consider their presently estimated economic costs, which would be tantamount to assigning zero prices to non-market goods? Or do we also factor in non-economic aesthetic or moral values? If so, how are those non-economic values factored in? Conversely, how do economic values factor into policy decisions based primarily on non-economic goals?

6. Of the dozens of tales of government mismanagement recounted in Anderson and Leal (1991), not one concerns resources, such as wilderness areas, that are subject to single

or dominant use (as opposed to multiple use) management. In another study, John Baden and Dean Lueck (1984, 41–2) found that the opportunity cost in preserving *most* wilderness lands is ‘zero,’ and that the bureaucratic bungling is avoided by the requirement of ‘passive management.’ Nevertheless, Baden and Lueck claim that public ownership ‘leaves the future of the wilderness on very shaky ground.’ The ‘real threat,’ they argue, ‘*could* come from governmentally mandated exploration and mining in the event of politically induced constraints on the supply of strategic minerals.’ It is unclear, however, whether privatization would reduce the threat of exploration and mining, especially if the wilderness lands were privatized according to a competitive bidding system, which would advantage well-endowed mining companies over environmental groups.

7. For instance, the US Forest Service, in the Department of Agriculture, is responsible for managing National Forests for multiple uses, including timber, mining, recreation and wildlife (see, e.g., the Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. §528). In Poland, the Ministry of Environmental Protection, Natural Resources and Forestry is, in various ways, responsible for resource use and development, as well as preservation.

8. The free marketeers claim that non-profit environmental groups are rich enough to compete against for-profit corporations in acquiring property rights to public lands. They point out that the 13 largest environmental groups in the United States possess a combined annual budget of over US\$400 million (Anderson and Leal 1991, 94). However, as William Funk (1992, 514) has pointed out, two oil companies, Exxon and Mobil, earn more than that *in a single day*—US\$493 million a day on Funk’s estimate, which is based on combined annual gross revenues from sales of more than US\$180 billion. So initial endowments are far from equal. And it is hardly surprising that those who profit from exploiting natural resources on public lands have more money with which to purchase further resources (for exploitation) than those who ‘profit’ from preserving resources. This reflects a built-in bias of the market-based allocation system the free-marketeers promote. Of course, that is not the only available mechanism for allocating publicly owned resources.

9. This is not to say that the railroad land grants were inefficient or unprofitable to the nation. Some commentators have argued that the United States government, and the public-at-large, received good value for the railroad land grants (see, e.g., Wilner 1981). Be that as it may, it remains clear that the government allocated land to the railroads not by market criteria but by political and even personal considerations.

10. In 1995, for example, the federal government was forced, under the terms of the 1872 General Mining Law, 17 Stat. 91, to convey more than US\$3 billion worth of publicly owned minerals to the ASARCO Corporation for a grand price of US\$1,745. That comes to only 0.000058 percent of market value (*Bureau of National Affairs, National Environment Daily*, Dec. 5, 1995). On the 1872 General Mining Law, see generally Leshy (1987).

11. Critics of free market environmentalism, such as James E. Krier (1992, 332–3) and William Funk (1992, 513–14) have focused much-needed attention on the allocative problems entailed by privatization. And property rights economists are only beginning to develop models of transaction costs in privatization (see Jung et al. 1995).

12. Certain procedural limitations apply. For example, citizen plaintiffs must give 60 days’ notice to the EPA Administrator, the state where the alleged violation occurred, and the alleged violator before filing suit (42 U.S.C. §7604(b)).

13. If there is a shortcoming in Rose-Ackerman’s book, it is that she does not adduce any empirical information to support her conclusion that broader public participation rights are ‘more conducive to good policy.’ If that statement is true, we should be able to predict

that, in the long run, Germany would have lower environmental standards and more lax enforcement than other countries with broader public participation rights.

14. The 1981 Censorship Law was repealed in 1990 (1990 Dz.U. No. 29, item 173).

15. Some would maintain (as Ricardo and Malthus did) that resource supplies can only decline. This certainly is true as a *physical* matter—there is only a finite amount of land and other resources on or in the earth—but not as an *economic* matter. Economic scarcity always is relative to the rate of demand and the dynamic efficiency of the economy. Especially under conditions that facilitate technological innovation for resource conservation, the ultimate physical barrier to growth can be avoided. That does not mean, of course, that physical scarcity can be ignored. Indeed it is the recognition of that scarcity that drives resource prices and spurs efforts to increase factor productivity, for example by technological innovation (see Arrow et al. 1995). This is what makes possible the counterintuitive, but fortuitous, result that most (commodity) resources are less (economically) scarce today than they were a century ago (see Simon 1981).

16. The environmental journalist Frances Cairncross (1995, 98–9) has noted that the purpose of GDP is merely ‘to measure transactions that pass through the market’; it is not an indicator of net social welfare or quality of life. Unfortunately, GDP often is taken as a proxy for net social welfare, including by critics of environmental policies.

17. For a more detailed discussion of the relationship between environmental regulations and productivity, see Haveman and Christensen (1981); also see Cole (1996).

18. For recent examples of attacks (from different perspectives) on the rule of law, see, for example, Hasnas (1995) and Mootz (1993).

19. Arguably, the rule of law would still be a useful, even critical, *myth* for democratic societies were it entirely mythical. All cultures, after all, are founded upon myths. Even the culture of science, which supplies the most concrete ‘facts’ of contemporary Western civilization, is founded ultimately on (very useful) myths (see Popper 1963).

20. Hayek mistakenly refers to the Solonian reforms by the term *isonomia*. The correct term (indeed, Solon’s own term for his reforms) was *eunomia*. *Isonomia* first appeared several decades later to describe the Cleisthenian reforms, which went well beyond Solon’s reforms in providing for substantial political equality (including equal access to political office and equal opportunity to participate in policy making) as well as equality before the law. Indeed, the word *isonomia* became virtually synonymous with the (later appearing) term *demokratia* (see Vlastos 1953, 1971). Nevertheless, Hayek was on the right track in defining the rule of law on the basis of general application rather than normative content. However, in other writings, Hayek (1960) seemed to take a broader view of the rule law, something closer to *isonomia* than *eunomia*.

21. What it means to be ‘similarly situated’ is, of course, contestable. There is no fool-proof formula for determining the class of similarly situated persons for all legal rules. At the very least, the rule of law requires the best effort to apply the rules as consistently and even-handedly as possible, allowing for legitimate distinctions.

22. Interestingly, companies that measure investment risks abroad utilize a Rule of Law index. The International Country Risk Guide’s (ICRG) Rule of Law index measures, among other things, the extent to which a given country has ‘a tradition of depending on physical force or illegal means to settle claims.’ The ICRG implicitly defines the Rule of Law more broadly than I do. In fact, the ICRG’s Rule of Law variable used to be labelled ‘law and order tradition,’ a title more appropriate to the panoply of institutional considerations it reflects. It is nonetheless interesting to see how the international business commu-

nity has seized upon the rule of law concept as a practical and measurable factor indicating a state's commitment to a certain relationship between law, politics and power (see Keefer and Knack 1994, 6, 23).

23. If I understand Thompson correctly, his critics, including Morton Horwitz (1977), miss the point when they complain, for example, that the rule of law cannot be 'an unqualified human good' because '[b]y promoting procedural justice it enables the shrewd, the calculating, and the wealthy to manipulate its forms to their own advantage.' Horwitz's criticisms prove at most that the rule of law is not a *sufficient* condition for social justice. But Thompson's reference to 'shams and inequities which may be concealed beneath the law' clearly indicates that he did not consider the rule of law a *sufficient* condition for a just society; he only thought it a *necessary* condition. That is what makes it, in his words, 'an unqualified human good.'

24. Of course, laws may also serve non-normative purposes. They may articulate a society's goals and aspirations. Thus, for example, section 101 of the National Environmental Policy Act (42 U.S.C. §4331) of the United States is completely unenforceable but articulates a national environmental ethic symbolizing a clear (if limited) commitment to environmental protection and resource conservation.

25. In 1956, worker riots in Poznań contributed to the elevation of Władysław Gomułka as Party First-Secretary. In 1970, when Gomułka attempted to raise food prices during the Christmas holidays, workers rioted, and he was replaced by Eduard Gierek, who immediately rescinded the price increases. Gierek was deposed a decade later, after his efforts to raise prices in 1980 led to strikes in Warsaw and Radom, and ultimately to the emergence of the Solidarity movement in Gdańsk. He was replaced temporarily by Stanisław Kania, who proved unable to quell the public unrest. Kania was soon replaced by General Wojciech Jaruzelski, who did not attempt to placate the unrest, but stifled it by declaring Martial Law in December 1981 (see Davies 1982, ch. 23; 1984, chs. I, VI, VII; Leslie et al. 1980, ch. 11 to Epilogue).

26. This would be especially problematic if the eco-totalitarian country operated with competitive markets because 'firms under the pressure of competition can be assumed to pay attention to arguments without a legal or economic content only when their costs of reducing pollution are negligible' (Bohm and Russell 1985, 454). But then, an eco-totalitarian country without competitive markets would have its own problems with environmental protection, given soft budget constraints and slow rates of technological innovation that seem endemic to centrally planned or administered economies.

27. I am assuming here (and I believe it is a fair assumption) that Lewis really means democratic capitalism when he uses the term 'capitalism.' Much of his argument for a capitalist imperative certainly seems to presume democratic political institutions, as well as capitalist economic ones.

Bibliography

I. STATUTES AND REGULATIONS

Poland

1922 Dz.U. No. 102, item 936	Ustawa wodna z dnia 19 września 1922 r. (Water Law of Sept. 19, 1922).
1934 Dz.U. No. 31, item 274	Ustawa o ochronie przyrody z dnia 10 Marca 1934 r. (Nature Protection Act of Mar. 10, 1934).
1944 Dz.U. No. 4, item 17	Dekret Polskiego Komitetu Wyzwolenia Narodowego z dnia 6 września 1944 r. o przeprowadzeniu reformy rolnej (Decree of the Polish Committee of National Liberation of Sept. 6, 1944 on the Execution of Land Reform).
1944 Dz.U. No. 15, item 82	Dekret Polskiego Komitetu Wyzwolenia Narodowego z dnia 12 grudnia 1944 r. o przejęciu niektórych lasów na własność Skarbu Państwa (Decree of the Polish Committee of National Liberation of Dec. 12, 1944 on taking over some forests as property of the State Treasury).
1947 Dz.U. No. 64, item 373	Dekret z dnia 1 października 1947 o planowej gospodarce narodowej (Decree of Oct. 1, 1947 on national economic planning)
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About the Author

Daniel H. Cole is professor of law and professor of public and environmental affairs at Indiana University, where he also serves on the Affiliated Faculty of the Ostrom Workshop. He is the author or editor of nine books and more than four dozen articles, essays, and book chapters.