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TRANSITION AND ENVIRONMENT

Bedřich Moldan

I. Countries of Central and Eastern Europe¹

The countries of Central and Eastern Europe (CEE) are called "economies in transition." These countries have the challenging task of deeply transforming their political, social, and economic systems. They have abandoned the totalitarian, centrally planned systems and are striving to build democratic, market-oriented civic societies. The maintenance of a healthy environment is an indispensable part of these societies; thus, environmental improvement is one of the important tasks of the transition period.

The CEE countries have neither a common history, nor the same contemporary situation, nor identical ideas about the transformation process. During the 1930s, Czechoslovakia was one of the ten most developed countries in the world, maintaining a strong economy and a fully developed democratic system supported by a population that had for centuries been educated, middle class, and urban. According to most indications, it was more developed than most Western European countries at that time, including, for example, Austria. However, more than forty years of communist rule halted the growth of even the most advanced CEE countries and resulted in the economic leveling of the current average per capita income (adjusted by purchasing power parity of the respective currencies) of citizens in CEE countries.

The devastation and decline caused by communist rule is so far reaching that governments and citizens alike are faced with the extremely difficult task of balancing concerns for a number of priority areas, of which the environment is just one. The high-

est priority is generally given to economic and political restructuring: democracy and a free market are the most important goals. However, when compared to the rest of Europe, the overall environmental situation of the CEE countries is very serious and needs immediate attention. One of the results of the polluted environment (and generally unsound lifestyles) is a relatively short life expectancy at birth.

II. The Environmental Legacy and Its Causes

Most of the major environmental problems of CEE countries are rooted in the political and economic structure of their societies and forty-five years of Soviet-dominated communist governments. The first and most important cause of environmental deterioration in all CEE countries is central planning. The goals of communist centralized planning were not focused on the welfare of the society but on building up Soviet military and political dominance over the world. To that end, everything was directly or indirectly related. Here lies probably the most important feature of communist rule over the entire Soviet bloc. In addition, central planning is inherently ineffective and wasteful.

A very obvious and direct consequence of central planning is the economic and industrial structure of CEE countries, with an overemphasis on heavy industry. In all Soviet-dominated countries, steel manufacturing, heavy chemical industries, mining, energy, heavy machinery, and the like took high priority. Among these, the enormous military industry was number one. All kinds of resources were devoured by these industries, including the best-paid and most-educated work force.

A typical result of the disastrous industrial structure was the extremely high consumption of primary energy, mostly based on low-quality solid fuels.

Directly connected with this was the excessive exploitation of natural resources of all kinds. The entire Soviet economy was based primarily on the enormous mineral riches of the USSR, which encompassed one-sixth of the world's landmass. The resources of CEE countries were exploited with equal brutality and recklessness, all the more so because in this region they were more readily accessible than those in the remote and frozen Siberia. Needless to say, no measures were taken to pro-

tect the environment. Virtually without exception, production processes were wasteful. The only important criterion was planned parameters, the first production objective (in tons, numerical product quotas, gigajoules, etc.). There were no incentives to introduce effective or environmentally friendly technologies.

In this context, harmful agricultural and forestry practices should be stressed. Here, the methods of central planning were especially absurd. The required production quotas — set by bureaucrats in remote capitals — were met through excessive use of heavy machinery, chemicals, and labor. The result was a polluted environment (including damaged or eroded soil), an enslaved people, suffering animals, and food contaminated by many kinds of harmful substances.

Another typical feature was Soviet-style urbanization based on (mostly) large, concentrated settlements. People were forced to live in drab concrete-slab apartment blocks located far from their jobs, cultural centers, and recreational facilities. These settlements are still one of the most visible legacies of the past regime. Large cities, small towns, and villages from Vladivostok to Prague are spoiled by them. Apart from being constructed in almost identical gray concrete, these ugly buildings have other common features: almost no greenway, polluting central-heating plants, inadequate maintenance, and insufficient wastewater and garbage treatment.

Neglect of environmental problems was almost universal and was exacerbated by the general hypocrisy of the regime, which pretended to be the most advanced, the most humane, and the most socially just. There was no place for the evils typical of “rotten capitalism,” e.g., environmental pollution. No such thing is, in principle, possible for the best of all possible socio-economic arrangements.

Reluctance to admit the gravity of environmental problems went hand in hand with secrecy. Anything that was not in line with a shining image of the regime was secret and, therefore, officially nonexistent. To tackle problems effectively when their existence is not even admitted is difficult indeed.

One of the decisive features of the economic rules of the regime was blurred property rights. Almost everything, particularly all means of production, were in the “peoples’ ownership,”

i.e., ownership by nameless party-state bureaucrats. (The only exceptions were the so-called personal belongings.) Therefore, no one was responsible for the condition of any property, and all public property — cities, factories, houses, roads, etc. — were slowly but unstoppably deteriorating.

This situation was aggravated by unrealistic pricing. No prices were set by market forces (as no market existed); all were decided by bureaucrats. No signals of scarcity were given or received. The supply of energy and raw materials was heavily subsidized, leading to even further squandering.

Environmental legislation generally existed. Apart from being mostly incomplete and incomprehensive, it was not enforced. The laws were ostensibly genuine and had strict standards, but they were neither enforced nor enforceable. In fact, the laws were never truly meant to be observed; they were just a part of the hypocritical image of the “most humane and just” system in the world. There are several reasons that laws were, in principle, not enforceable. First, the standards were unrealistically stringent, lacking adequate technological and economic prerequisites. Second, there was no sufficient institutional structure — no ministries of environment (or institutions with legal jurisdiction), no involvement of the judicial courts, and no adequate monitoring. Third, there was no adequate mechanism and, indeed, no reason for one area of the party-state bureaucracy to punish another area of the same bureaucracy for failing to observe the law, particularly without any public participation or control.

In all developed and democratic countries, the most important supporter of the environmental cause is the general public, the concerned citizens. Public participation is the single most decisive factor of any effective system of environmental protection. In a totalitarian communist regime, no such thing was thinkable, especially because there was an almost absolute lack of accurate information on the state of the environment. In addition, the understanding of environmental problems was low due to a vastly inadequate and uneven level of education. Technological knowledge and technical skills were generally at rather high levels (comparable to the West), but other areas such as economics, business and managerial practices, the humanities, and environmental education were at a low level.

All of the above factors were serious, and most of them were very difficult and costly and would require a long time to improve. While some of them are now gone, e.g., the lack of information and the hypocritical regimes, most of them are only gradually and sometimes painfully being removed. It is no wonder that environmental improvement in CEE countries is a very slow and inefficient process. However, there is no reason for frustration and disappointment: although the task is extremely difficult, some improvement has already been made.

III. Principal Environmental Problems

A. Air

In the majority of CEE countries, air pollution is regarded as the most important environmental problem. The main cause is energy production and consumption, particularly because energy production is usually based on low-efficiency technology and, to a great extent, on low-quality solid fuels, such as high sulfur lignite. Only recently has transport become another major source of air pollution because of the growing number of cars, trucks, and buses. One of the exceptions is Budapest, where car and other traffic has been the main cause of air pollution for more than a decade. All of the cities and larger industrial areas are subject to heavy air pollution. Winter smog episodes resembling those of London in the 1950s are especially damaging.

B. Water

Water quality and scarcity are regarded as important environmental problems in all CEE countries, but the relative importance assigned to it varies. Generally speaking, no CEE country experiences very serious water scarcity, with the exception of certain areas in the Balkans. The majority of the population has access to safe drinking water that is of sufficient if not optimal quality. There is not enough information on wastewater treatment (with the exception of the more advanced countries). The quality of river water varies and in industrialized regions is rather poor.

C. Waste

Problems related to both hazardous and municipal wastes are relatively high on the priority list in all CEE countries. During communist rule practically no proper disposal facilities existed in the whole region, a region where the production of all wastes, particularly industrial waste, is enormous. The result of this neglect is a large number of very unsafe sites for municipal and industrial waste landfills.

D. Highly Polluted Areas

One of the typical products of central planning is regions in which many industries are concentrated. The bases of such concentration are usually coal deposits, steel mills, and the like. These areas now represent the pollution "hot spots" where people's exposure to various pollutants reaches critical dimensions.

The most well known of such areas is the so-called Black Triangle, the area encompassing southern parts of the former German Democratic Republic and Poland and the northern part of the Czech Republic. The regions of Northwest Bohemia and Silesia represent probably the most polluted areas in the entire CEE region. Nevertheless, these and other areas are relatively isolated, and many beautiful and relatively pristine landscapes still exist there.

E. Soil

The quality and supply of soil are not among the most pressing environmental problems in CEE countries. However, nearly 50 percent of all soil is potentially endangered by water erosion, which was aggravated by poor cultivation practices during the communist domination. Despite the fact that agriculture in most countries is not technologically advanced, the consumption of industrial fertilizers and pesticides is rather high.

F. Urban Environment

With only a few exceptions, the urban environment in CEE cities is neither pleasant nor healthy. Too many people are exposed to

traffic noise and to high concentrations of air pollutants, primarily of suspended particulate matter. Cities are poorly designed, and their suburbs are dominated by the aforementioned complexes of ugly concrete slab buildings. There is a lack of user-friendly infrastructure, recreation areas, playgrounds, and greenery. The façades of the houses are dilapidated, as are most pavements and road surfaces.

In several countries, however, this situation is already a matter of the past. At least in the Visegrad countries, (the Czech Republic, Slovakia, Hungary, Estonia, and Slovenia), a great improvement has been achieved in this respect since 1989.

G. Nature Protection

There are many pristine natural areas in CEE countries, most of which are protected areas. Even if the number of tourists is increasing in only some places, this represents a real danger for natural parks and areas. More devastating for the landscape and natural environment are (a) the harmful agricultural practices that incorporate excessive use of fertilizers and pesticides, and (b) changes in land use, which often bring damage to natural habitats. Probably the most important problem in this category is forest damage caused primarily by acid deposition. The damage is very serious in all CEE countries, above all in the Czech Republic and Poland.

H. Global Issues

Most CEE nations (with the possible exception of Poland) regard themselves as small countries that have no significant impact on the global environment. Quite to the contrary, however, the contribution of CEE countries to global — or at least continental — environmental issues is important and definitely more serious than it should be given the size of their population and economy. The emissions of SO₂ and NO₂ are essentially exported outside the country and cause acid deposition far beyond the national borders.

IV. Changes since 1989

Environmental improvement was a high priority among citizens of all CEE countries prior to the fall of communism. There had been a deep concern over the health effects of environmental pollution, especially in the most affected industrial areas. Environmental problems were also used by the public as a political weapon aimed at demonstrating the misgivings the people had about the mistakes of the regime. Pressure from environmentalists and concerned citizens helped substantially to break down the communist system. The revolutions of 1989 had a distinct green shade.

After the establishment of democratic governments, many people hoped that the environment could be improved almost as easily as the old regime had been dismantled. There was wide public support for the creation of environmental institutions, Green Parties, and other ecological organizations. Environmentalists held important government positions such as members of parliament and cabinet ministers. Environmental laws passed very easily, and many new governmental and nongovernmental institutions were established. Relatively large financial resources were devoted to environmental cleanup (given the general scarcity of funds), some coming in the form of Western aid. Most countries created special environmental funds.

Despite the initial enthusiasm and all of the efforts, there were no quick results. At least three reasons exist for that. First, the damages were great, indeed, probably deeper than originally thought, and their causes are firmly rooted in the existing industrial and economic structure. The pollution has been created mainly by the vast industrial complexes consisting of power plants, mines, steel mills, and the like. This extensive "hardware" and its technologies simply cannot be changed quickly.

Second, there was not enough experience and knowledge among either environmentalists or relevant decision-makers to select the most efficient methods of environmental cleanup. One of the serious mistakes committed was dealing with environmental issues in isolation and not in integration with the overall transition process, particularly with the economic aspect. Thus, the unique "window of opportunity" for the CEE countries not

to repeat the mistakes made by developed countries twenty years ago may definitely have been lost.

Third, even if the initial environmental enthusiasm of the period immediately after the fall of communism was high, it was neither exceptionally strong nor sufficiently lasting to compete successfully with other important tasks of the transition. People realized very quickly that even if the environment is an important issue, there are other priorities, some of them more pressing and more immediate. Some hardships of the transition period—decreases in real wages of large segments of the population, high inflation rates, unemployment, and other social and economic problems—have pushed environmental problems further down on the agenda. These difficulties, which are more than understandable, may slow the process of environmental improvement, but by no means will they halt it. The basic premises of its ultimate success are already present. They are as follows.

A. Democratization

Creation of a free and open democratic society is the most basic prerequisite to substantial environmental improvement. Democratically elected governments with wide public support, activity of green NGOs, and free access to information are fundamental driving forces for “societal ecological conscience” and eventual successful environmental cleanup.

B. New Institutions and Legislation

In all CEE countries, there exist ministries of environment and other relevant institutions, such as parliamentary environmental committees, inspectorates, monitoring systems, and environmental liabilities, and relevant environmental laws have already been passed by parliaments in almost all CEE countries. Regional and local governments have been established and their responsibilities defined, and the various “players” are gradually learning their roles.

Naturally, the impact of new institutions and legislation is not immediate. Everything takes time: their creation, attainment of a certain degree of maturity, and positive response by the rest of

the society. If, for instance, a new air pollution law is passed that requires the installation of desulfurization scrubbers, it is neither easy nor inexpensive to build them.

C. Economic Restructuring and Privatization

The economic changes that have been implemented have already had beneficial consequences. The decrease in production of heavy industry has resulted in an overall reduction of harmful emissions into the air and water by approximately 20 to 30 percent. Obsolete and wasteful technologies are gradually being replaced by modern efficient ones that are automatically more environmentally friendly. Incentives for more efficient production practices have been created by higher market prices for energy and materials. Most of the harmful subsidies have already been withdrawn. The complete phasing out of subsidies on industrial fertilizers in the Czech Republic caused an immediate and substantial drop in their use and, subsequently, a visible improvement in the state of the natural environment, eutrophication of waters, and quality of food.

Newly defined property rights have placed responsibility on owners who are made liable for environmental duties. On the other hand, some new entrepreneurs who are very active in pursuing profits regard environmental regulations as obstacles to the rapid development of their businesses. They are quick to explore and exploit any loopholes in the legislation in order to evade their responsibilities. It is important to remember that this is a region where abiding by the law was neither a high virtue nor an expected behavior. The building of a lawful society is a very difficult, painful, and slow process.

D. Integration of Environmental Protection into Economic Development

The contemporary idea that environmental concerns and rapid economic development are not exclusive, but rather mutually supportive, is not widely shared in the CEE region. The "win-win" strategy is mostly unknown or viewed as a nice-but-unrealistic theory. Most decision-makers do not understand the significance of this basic integration and, therefore, do not believe in it.

Environmentalists, on the other hand, are reenforcing this disbelief by not stressing the fundamental link and possible harmony between economy and ecology; rather, they point out the differences and contradictions between them. Both are locked into the environmental paradigm of the early 1970s in which the contradictions between economic growth and efficient environmental protection seemed to be fatal.² However, since *Our Common Future*³ and the 1992 Earth Summit in Rio de Janeiro, the idea of sustainable development offers a solution accepted by most countries throughout the world. It is symptomatic of the CEE countries that their decision-makers are reluctant to adopt this new environmental paradigm.

Nevertheless, most CEE countries are devoting substantial financial resources to environmental cleanup. The relatively massive investments for abatement and end-of-pipe technologies are already producing results. For example, due to the aggressive program of constructing wastewater treatment plants in the Czech Republic, the organic pollution of Czech rivers has decreased by 40 percent since 1989. In this case, the investments were absolutely necessary, but in others, the adoption of preventive strategies could result in better, more efficient, and less expensive options.

E. International Cooperation

After decades of Soviet domination, all CEE countries are now proud to once again be equal members of the European and world community of nations. They are eager to develop international cooperation and are, understandably, one-sidedly focused on the developed world. Relations with developing countries enjoy only a secondary priority, while cooperation within the CEE region is also generally put on the back burner. To a great extent, this is a result of a forced "friendship" within the CEE region that was only a cover for avoiding risk, mistrust and cheating. This situation is very unfortunate and is, indeed, a serious obstacle to the efficient and trustworthy cooperation which is probably an indispensable prerequisite to efficient environmental improvement of the whole region. In this context, such institutions as the Regional Environmental Center for

Central and Eastern Europe, located in Budapest, are very important assets.

V. Visible Results

Many criticize the environmental recovery process in the Central and Eastern European countries as slow, inefficient, full of mistakes, and a mimicry of an unsound and obsolete Western model. These critiques may be true; but as we have seen, the quick, elegant, and fully efficient methods are simply not available for many reasons.

Despite the slow pace, there is a genuine effort being made to improve the environment, and many results of that effort are already visible. There are positive trends in virtually all environmental indicators in all CEE countries. The traveler who visited the region before 1989 can see encouraging changes everywhere. Scientific information and monitoring systems confirm the simple observations made by the naked eye.

Appendix Country Profiles⁴

Albania

Following World War II, Albania was absorbed into the Eastern bloc of communist countries, but in 1961 she broke off relations with her East European partners and fell under Chinese ideological and economic domination. After severing relations with China in 1978, Albania became completely isolated from the world, and, after having lived under authoritarian rule for forty-five years, Albania was left with a ruined economy, myriad social problems, and no tradition of democracy. Although Albania suffered from almost the same social and economic problems as other former communist countries, the intensity and consequences of these problems in Albania were far more grave.

In March 1991, the country held its first pluralist parliamentary elections, which were won by the former communists. This initiated protests and eventual anarchy, leading to a complete economic paralysis. After another election in the following March, a coalition of reformers led by the Democratic Party

came into office and began the process of overall democratic reform in the country.

In less than three years, important steps were made to develop a new environmental policy. A national environmental administration was created to perform the urgent task of preparing a legal and organizational framework with the goal of protecting the environment. However, the environmental problems in Albania have been far from fully addressed, and the country is still in the initial phase of establishing a workable environmental protection system. Albania is currently lagging behind other CEE countries in establishing such a system.

Bulgaria

The political changes in Bulgaria in the autumn of 1989 were characterized by an extremely high level of involvement by the national environmental movement. NGOs such as Ecoglasnost, the Environmental Management Training Center, and Borrowed Nature, along with various Green Parties, contributed significantly to much of the new democratic legislation that has been passed following the political changes. Since 1991, however, the number of Green Party deputies in parliament has decreased significantly.

The general thrust of the National Environmental Action Plan (NEAP) rests on the premise of aggressive privatization and decentralization. While this premise continues to underpin Bulgaria's restructuring efforts, it is now evident that the transition period predicted by the NEAP will be longer than anticipated.

The Bulgarian government places the highest priority on minimizing damage to human health. Stopping environmental degradation of the type that damages natural resources and physical capital and/or causes considerable amenity loss is an important issue, but it is not as urgent as addressing health concerns. The recommended short-term strategy is aimed at addressing the most health-threatening environmental "hot spots" and at continuing to advance the design and implementation of an institutional, legal, and regulatory framework consistent with the evolving character of the economy.

Environmental quality has improved in general, e.g., pollution levels have been reduced in the "hot spots." Nevertheless,

progress has been slower than anticipated because of the slow tempo of economic reforms on which it is based. Many environmental improvements have resulted mainly from the economic and industrial slowdown.

Croatia

The Republic of Croatia is a new state that finds itself in the midst of a difficult economic transition period and having to support heavy damages from the war. Generally, the environmental situation in Croatia is better than in other CEE countries, but it was not—and still is not—treated as a political priority by the government or the majority of the population. Nevertheless, important steps have been taken during the past years to address environmental issues, one of which was the adoption of legislation acknowledging the state of the environment as a serious issue in need of proper attention.

Priority is given to the protection of the sea and surface water, which already benefit from having one of the best set of regulations in Croatia. In some areas such as Rijeka, air quality is a priority because of pollution from local sources, which is aggravated by transboundary pollution, particularly from neighboring Italy.

Czech Republic

The Czech Republic, which includes the regions of Bohemia, Moravia, and part of Silesia, houses the more industrialized and economically stronger two-thirds of the former Czechoslovakia. It became an independent state on January 1, 1993, after the dissolution of Czechoslovakia, which had existed since 1918 (with the exception of a short interruption caused by World War II).

During communist rule (1948–1989), the overall decline of Czechoslovakia was deeper than that of the other CEE countries. Communist aggression was perhaps not as physically brutal as in other countries, but it was more thorough: not only all factories but every single shop was nationalized, as well as 96 percent of agriculture. This was unique in the region.

Czechoslovakia had maintained a long industrial tradition, which the communists strengthened and shifted toward heavy

industry. One result of this and other harmful economic policies was the record level of pollution, which put the Czech Republic on the top of the list of most polluted European countries (along with the former GDR).

Currently, the most serious environmental problem is air pollution, especially in heavily industrialized areas, the most prominent of which are Northwest Bohemia, the Ostrava region (North Moravia and Silesia), and the capital city of Prague.

The Velvet Revolution of 1989 awakened many high expectations, including environmental cleanup. As the results have not appeared quickly, there is a growing frustration that the progress is not sufficient. However, almost all environmental parameters have already been improved substantially, even if this is, to a large extent, a result of an economic slowdown during the first years of the transition period.

Hungary

In July 1994, the parliament of the Republic of Hungary approved the government's Program for 1994–98, which defines the main goals, tasks, and necessary institutional and regulatory system for those years. The environmental chapter is based on the "sustainable development concept" and the main principles of the National Environmental and Nature Conservation Policy.

The restructuring process of the Hungarian economy in recent years has been accompanied by an intensive fragmentation process. This fragmentation creates many dilemmas for environmental regulation, enforcement, and control. At the same time, the economic restructuring of some highly polluting sectors has resulted in environmental gratis effects, e.g., in the industries of mining, aluminum, steel, energy, and agriculture.

One of the major environmental problems is the gap between the public water supply and wastewater treatment, which is more than 40 percent. In the last decades, there has been a dramatic increase in the number of homes (currently 95 percent) connected to the public water supply, but the treatment of wastewater could not grow at the same pace.

In the last ten to twelve years, the number of the cars in Hungary has doubled; in 1994, the yearly increase exceeded a 100,000-car limit, but the quantity and quality of roads has

changed little. In 1993, the average age of the car fleet was more than ten years; among private cars, 25 percent are still running on two-stroke engines.

In 1993, approximately six-tenths of a percent of the gross domestic product was spent on environmental protection (about seven-tenths of a percent, including household expenditures). This is one of the lowest among OECD (Organization for Economic Cooperation and Development) countries. According to official statistics, environmental investments account for approximately 4 percent of total investments. Environmental policy still is not the government's most important priority, but its role is slowly growing.

Latvia

Latvia is undergoing the transition from a centrally planned economy to a market economy. Since 1989, there has been a general decline in economic activity, although production figures for 1994 indicate modest growth. Privatization of industrial enterprises did not begin until this year, so significant growth over the next few years is unlikely.

The economic downturn has created a very difficult situation for several groups in society, such as pensioners, families with more than three children, and industrial workers (who have been laid off because of closings or declines in production in several enterprises). A large section of the population now lives below the official poverty level. The government is under public pressure to address social issues, such as social security, health care, and public safety, and the general level of environmental awareness is rather low among the population.

During the first parliamentary elections in 1990, the Green Party succeeded in earning seven seats in the national parliament. Thus, from 1990 to 1993, there was a strong green lobby in the parliamentary and governmental structures; however, public awareness has been rapidly declining due to the changes in the political and economic situation and a major decline in the standard of living.

Lithuania

Substantial progress has already been made toward market reform. The environment was not high on the political agenda and is not included in the government's list of economic priorities, but important environmental problems already have been addressed.

The highest environmental priority in Lithuania is the reduction of water pollution through the construction of wastewater treatment plants and the introduction of water quality standards and norms in line with European Union standards. Hazardous waste management is the second priority, and the principal measure here is the construction of temporary storage sites. The third priority is the cleanup of the contaminated sites, which pose the most serious threat to public health and the environment. These sites appeared following the withdrawal of the Soviet Army. Air pollution is linked to the overall economic situation. Recently, the amount of emissions has been reduced, allowing for time to undertake measures to stabilize the situation and to implement pollution prevention policies.

The Former Yugoslav Republic (FYR) of Macedonia

FYR Macedonia is the only republic from the former Federal Republic of Yugoslavia that withdrew from the federation peacefully and without bloodshed, but the disintegration of Yugoslavia created a dramatic decline in the political and economic fortunes of all its former republics. For the FYR Macedonia, the United Nations sanctions against Yugoslavia (Serbia and Montenegro) meant the loss of her main trading partners, thereby increasing poverty. In addition to the UN sanctions against Yugoslavia, FYR Macedonia's economic problems have been complicated by the Greek embargo on FYR Macedonia.

The political system was easily changed from a one- to a multi-party system, but the transition from a centrally planned economy to a market economy has been more difficult. The first positive results of the transition are barely noticeable. Privatization of industry has just begun, and agricultural privatization is expected to begin very soon, but public sector privatization is proceeding very slowly.

In the deteriorating economic situation, environmental problems are given the lowest priority. In 1994, funds allocated to the Department of Environment of the Ministry of Physical Planning, Civil Engineering, and Environment covered only administrative and salary costs within the department and not any particular environmental programs. (Unfortunately, the Department of the Environment is poorly developed and has a staff of only four.) In the past five years, the state has not given separate financial support for environmental protection. Financial support was withdrawn for certain environmental monitoring systems, and funds for the maintenance of some water purification and sewage systems were canceled, placing this essential work in jeopardy. Public pressure through the ecological movement has not yet succeeded in changing the government's environmental policy.

Poland

The high priority that Poland gave to environmental protection in the aftermath of the landslide political changes in Central and Eastern Europe gave this issue a durable base. However, during the past three years, there has been a decrease in the importance attached to environmental protection issues, with priority now given to achieving economic benefits. Environmental problems are no longer mentioned in public statements by Polish prime ministers or in official documents, such as the "Strategy for Poland," which was announced in 1994. In this long-term, comprehensive vision for Poland's development, the environmental impact of economic activities was omitted.

However, the fundamental structure of the system of environmental protection in Poland is well established. In 1994, the Ministry of Environment prepared a plan detailing objectives and investment targets for the implementation of the medium-term priorities. The basic objectives of the program are the reduction of harmful discharges into the air, water, and soil; decreasing environmental threats caused by transport or by industrial and transport accidents; the improvement of forests; and an expansion of protected areas. This program calls for a gradual implementation of new economic tools for environmental protection, improvement of existing and newly developed

legal regulations, promotion of clean production techniques, development of new site location policy, further development of the state monitoring system, enforcement of the law, and increasing societal awareness of environmental issues.

Romania

In Romania, the environment is considered a priority by the government, even if it does not take precedence over social issues. After 1989, the government established important initiatives in legislation on the framework of environmental protection. The participation of the public in policy development is a completely new idea that represents significant change since 1990. The public has already played a key role in influencing the decision to continue or terminate some environmentally detrimental activities, but public participation in Romania is still a delicate problem to be tackled. There are active environmental NGOs in Romania, and good cooperation between them and the Ministry of the Environment is a major factor in encouraging action to improve the environmental situation in the country. The municipalities, especially Bucharest, have proved to be less responsive to this kind of cooperation.

In 1992, Romania and World Bank experts published a policy paper titled "Environmental Strategy Paper," and a strategy for environment protection in Romania was proposed, which, in 1994, is in the final stages of discussion. According to this policy, the supreme principle is protection of human health. The hot spots of Romania have been identified with the help of studies and analyses accomplished over the last few years. Among the fourteen hot spots identified are Copsa Mica, Baia-Mare, Zlatna, Ploiesti, Brasov, and Bucharest.

Slovakia

Like other Central and Eastern European countries, Slovakia is undergoing an economic transition that brings with it a number of difficult tasks, such as reviving the economy, controlling unemployment, and creating new systems for health care, education, and social security. The environment has not been the

highest priority for Slovak policymakers, but it is regarded as important.

As a result of the economic downturn, industrial production has declined, having positive effects on the environment, particularly air quality. However, Slovakia still produces approximately 300,000 tons of sulfur dioxide per year, which is generated primarily by heating and power plants. Pollution of surface and ground water is a widespread problem and in fifteen districts has resulted in a shortage of drinking water. Waste disposal in Slovakia is generally uncontrolled; only 5 percent of recorded landfills are licensed. Special and hazardous waste is disposed of often without proper technical equipment or preparation.

In the period from 1990 to 1994, the Ministry of the Environment created an efficient administrative network for environmental issues. The Slovak Environmental Agency was established with offices in all of Slovakia's larger cities. Environmental investments are a very sensitive issue in environmental protection policy. The problem is the lack of financial resources and the difficulty of obtaining loans from international financial institutions.

Slovenia

The preoccupation with economic health has been accompanied by a shift away from "social values": quality of life, health, housing, and environment. While education was established as a strategic investment area eligible to receive additional funding with the support of the parliament, spending for environmental protection declined for three consecutive years after 1991, despite the 1993 passing of the Environmental Protection Act (EPA) which calls for just the opposite.

The priorities set by the EPA for addressing the most significant problems in the environment were the following:

- Limitation of air pollution (partly through the installation of energy-saving equipment in households and polluting enterprises).
- Protection of subterranean waters and purification of surface waters.

- Minimization of waste at the source, separate collection of waste, and closed material flows.

Air pollution is a problem mainly in certain industrial and urban regions and has in the past been effectively addressed. The environmental issues affecting Slovenia are all relatively amenable to treatment, and key issues are well understood. The country has access to sufficient funding in order to tackle them.

Notes

1. Unless otherwise noted, statistical information is taken from the following three sources: "A Middle Class Evolves," *Business Central Europe* (April 1995); David Stanners and Phillippe Bourdeau, eds., *Europe's Environment* (Copenhagen: The Dobriš Assessment, 1995 draft); and *Report on the Stage of Advancement of CEE Countries in Development and Implementation of the National Environmental Action Programs* (Budapest: The Regional Environmental Center for Central and Eastern Europe, 1995).
2. Danella H. Meadows, et al, *The Limits to Growth* (New York: New American Library, 1972).
3. World Commission on Environment and Development, *Our Common Future* (Oxford and New York: Oxford University Press, 1987).
4. *Report on the Stage of Advancement of CEE Countries in Development and Implementation of the National Environmental Action Programs*.