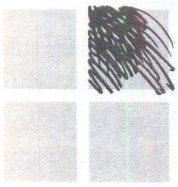

Hungary Seeks to Lift Blight of Pollution

Tamas Fleischer and Janos Vargha

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Forty years of centralized rule has left Hungary with two giant problems that will linger well into the next century.[1]

The first is an inefficient, unresponsive economic system that slowed economic growth and compromised the standard of living. The second is an antiquated industrial machine that achieved production quotas by ignoring environmental impacts, resulting in dangerously high levels of pollution that threaten the well-being of the nation's ecosystem and people.

Hungarians, freed from the oppression of centralized rule, are demanding improvements. Whether the nation's new political leadership can adequately redress these grievances will determine, in large measure, whether that leadership remains in power.

Examples of Hungary's environmental crisis are everywhere. Industrial processes have been largely responsible for widespread contamination of surface and groundwater. Today, about 1,000 Hungarian communities no longer have access to drinking water that meets minimum health standards.

Pollution also threatens aquatic habitats. Lake Balaton, Lake Velence, and the famed Danube River suffer from levels of pollution that have caused serious ecosystem damage. Some scientists question whether these systems can be brought back to ecological health; everyone agrees that it will take a great deal of time and money.

Widespread use of chemical fertilizers and poor farming practices have contaminated the nation's most productive agricultural land with heavy concentrations of nitrates, phosphates, and petroleum-based leachates.

The nation's industrial areas face different sources of pollution. Untreated emissions from the smokestacks of metal-processing plants, chemical factories, and coal-fired electric utilities have laced the air with unhealthful levels of carbon monoxide, nitrous oxides, hydrocarbons, and lead compounds.

For the most part, the nation's air pollution remains an invisible hazard, but emission levels have sometimes become so high that the pollutants paint the sky with grey tones that cause alternating streaks of light and shadow on the ground.

In the capital city of Budapest and other metropolitan areas, industrial air pollution is com-

pounded by carbon monoxide emissions from automobiles and trucks. Budapest, in fact, has a Los Angeles-like smog problem.

Under centralized rule, Hungary failed to establish regulatory authorities with sufficient powers to enforce anti-smog regulations. Moreover, economic development policies short-changed environmental concerns at the expense of production. Consequently, the problem has grown worse.

Water, soil, and air pollution in Hungary has had two important ramifications.

First, it has damaged the nation's ecosystems. The most visible damage is in the forests, where sickly trees and uneven growth patterns display tell-tale signs of acid rain. Declining timber yields are only one measure of the problem; more important is the impact that a sickly forest has on the fauna and flora that it nurtures.

Second, Hungary's troubled environment has increased the incidence of cancer and cardiovascular disease, particularly in urban and industrial areas where most people live. Together with a depressed economy, it has caused a rising number of mental health problems characterized by frustration, stress, and hopelessness. And, environmental problems may be partially responsible for the increasing incidence of mortality among men in their 30s.

Neither doctors nor scientists can prove a direct causal relationship between environmental degradation, illness, and early death, but the problems of pollution have made Hungary a less healthy and less pleasant place to live. It should come as no surprise that these trends are reflected in the nation's medical and health statistics. Today, people in Hungary live seven years less, on average, than people in other developed countries.

Geography

Hungary lies in a basin partially enclosed by the Carpathian Mountains, which serve as a curtain to block airflow and precipitation. As a result, Hungary (like many nations in Eastern and Central Europe) has few natural mechanisms to cleanse its domestic pollution or to minimize the impact of the pollution that drifts across its borders from neighboring nations.

Hungary's air pollution, however, cannot be separated from the declining health of its steel and coal industries. As the economic crises within these industries deepened during the 1980s, Hungary's industrial planners concentrated on maximizing productivity. There was no capital to invest in new, less polluting technologies or in control systems to lessen pollution from existing smelters.

One of Hungary's two industrial spines lies along the Danube River, which bears the marks of a half-century of systematic, state-directed economic planning. Along the banks of "brown" Danube lie a string of cement and aluminum factories, oil refineries, steel mills, and coal and nuclear plants. In the river basin's agricultural zones, the untreated byproducts of farming—primarily chemical fertilizers and animal wastes—add to the problem. As a result, the Danube may be Europe's most polluted river.

The impacts of pollution are not shared equitably. Despite rhetoric to the contrary, Hungary's previous regime could not eliminate class differences, and these differences have had profound consequences both for the environment and human health. For example, children growing up in Budapest's dilapidated sections have life expectancies comparable to children living in the Third World, while children raised in the city's elegant Rose Hill section are likely to live as long as children in the former Federal Republic of Germany.

Hungary's adverse environmental conditions also pose a threat to national parks and national forests protected by law. The nation's environmental regulations have not reversed the long-term and pervasive impacts of pollution. In fact, Hungary's experience during the past half-century has confirmed conventional wisdom shared by scientists in the East and West: regulations on the books are no substitute for action in the field.

In Hungary, the short-term interests of industrialists, farmers, and foresters usually have prevailed over the long-term interest of protecting the environment. As a result, arguments to protect "unprotected areas"

often have fallen victim to political pressures for industrial and economic development. Even when environmental values have been incorporated into policy, the basis of official support lies on a political foundation largely devoid of environmental considerations.

For example, Hungary's Lake Balaton has a long history as one of the nation's most attractive resorts. During the 1970s and 1980s, the quality of the lake's water deteriorated as a result of fertilizer runoff, intensive livestock breeding along the banks and hillsides, and too many summer tourists. At first, officials were slow to respond. However, because high-ranking members of the Communist Party vacationed there, the government eventually launched a remediation program that helped to avoid complete destruction of the lake's ecosystem.

The same split between environmental values and political and economic pressures can be seen in Hungary's water-management policies. The national water-management authority has tried to improve and expand the nation's public water supply system. However, the construction of water treatment and sewage systems has not kept pace with needs. The government has neither the capital or technological skills to build an effective nationwide water-management network, and agricultural and industrial practices continue to worsen.

Hungary's pollution problems developed within a distinctive social and economic milieu, and many of the preconditions that contributed to them persist. Thus, a strategy that aims only at eliminating the consequences of pollution will fail, and the nation will find itself in the unenviable position of always cleaning up the mess left behind instead of trying to prevent the mess in the first place.

The strength of the old guard in the new order helps explain the present official environmental strategy, which consists primarily of centrally-financed, symptom-treating interventions (for example, installing filters to curb emissions of dust and toxic particles from factories and power plants and siting hazardous waste-disposal facilities in remote places to avoid public outcries and protests). Scant effort has been devoted to altering production practices or establishing hefty fines for firms that disregard or exceed pollution standards.

The strategy thus far has sought to apply political solutions to environmental problems. Because Hungary's political environment retains its ties to the sensibilities and values of the previous era, official environmental programs and proposals bear a remarkable similarity to past programs. The revolutionary events that took place in the fall 1989 have yet to transform Hungary's environmental agenda.

In fact, citizens have been dismayed and angered by the government's efforts to shift responsibility for environmental problems and cleanup onto weakly organized and poorly represented groups that have voiced objections to environmental conditions. These groups have neither the resources or skills to address the problem. In effect, post-communist officials continue to blame the victims.

Even more disturbing, officials continue to foster policies that burden the least-able citizens with the costs and consequences of environmental mismanagement. Hazardous waste from the West continues to find a home in Hungary, and Western firms are hopeful that Hungary will soon agree to the construction of new nuclear power plants. Such events reinforce the prevailing notion that the force of public opinion and grassroots activism has yet to filter into the decision-making process.

Efficiency Improvements

Hungary's dated and inefficient industrial machine consumes too much energy and requires too many resources. In the previous accounting system, party officials accepted ecologically insensitive production as part of the cost of doing business. Existing industrial structures, despite their operating inefficiencies, were viewed as economical because they enabled industrial planners to keep costs to a minimum.

In short, continuing the operation of a poorly running plant was considered a more cost-

effective strategy than the construction of a new, efficient facility. The result: aging, inadequately maintained plants placed additional stress upon Hungary's vulnerable environment.

In the 1980s, the nation's patterns of consumption compounded its environmental problems. Hungary's elite, experiencing a rapid loss of power and a decline in living standards, sought to reverse its fall from grace by two means. First, in a crude variation of the West's consumer-oriented society, leaders boosted consumption by securing loans from Western banks. Second, the elite increasingly encroached on common property and resources to compensate for the declining value and productivity of the traditional centers of resource extraction and processing.

In the first case, capital that could have been applied to productive activities was squandered on the joys of immediate consumption. In the second case, natural resource reserves that both protected portions of Hungary's environment and served as symbols of more effective resource management were ruthlessly exploited in a vain effort to sustain an unsustainable system.

The depletion of natural and economic resources could not be separated from the erosion of social and political resources. The government's inability to provide a workable economic system and protect the nation's resource base undermined its legitimacy and ultimately cut the last threads of popular allegiance.

As a result, Hungary ironically became a centralized system of government devoid of regulations. It was a world stretched to the limits by contrary forces: autocratic rule on the one hand and anarchy on the other.

While the failure of a centralized system is an accepted fact in both the East and West, the framework for a new system has been constrained by a concern that the West has not tackled its own environmental problems. There is an abiding uneasiness that unleashing the forces of capitalism will simply trade one set of environmental problems for another.

Long-Range Objectives

The aim of Hungary's long-range environmental strategy should be to transform the nation's production and consumption patterns. This strategy does not simply involve technological innovation. It includes overcoming serious impediments in politics, culture, and education.

A rigid, centralized system of decision making, a persistent violation of human rights and disregard for the rule of law, restricted information, the absence of non-governmental entities to serve as watchdogs over government actions, and complete government ownership of the means of production—all these have left a deep scar on Hungary. That scar will take time to heal. Long after the pain and suffering have ceased, it will remain a visible reminder of the difficult circumstances the nation has endured.

Two significant steps in the healing process are the renewal of state-sponsored environmental protection organizations and the strengthening of citizen-led environmental groups. In the past, environmental agencies were controlled by those who had both a vested interest in ignoring environmental problems and the authority to impose their will. These agencies only began to respond to the pressures of grassroots ecological groups when the ruling elite began to lose its grip on society in the mid-1980s. This lost power not only left a power void but also emboldened citizens to voice their opinions for the first time since the aborted 1956 uprising.

Public pressure likely will compel parliament to pass new, realistic laws for environmental protection. Hungary's newly formed political parties are devoting a large amount of resources and rhetoric to ecological issues.

At some point, Hungary's new political leadership may seek to make economic concessions by weakening its environmental commitment. It is at this stage that citizen groups will play a crucial role. Such groups are gaining in strength and influence. Moreover, they occupy a moderate position relative to the emergence of militant environmental groups.

As diversity of opinion on environmental matters grows, the decision-making process is likely to improve. Diversity means not only a wider pool of ideas from which to draw, but it also means that groups can strengthen their own agendas and strategies by learning from one another. It is essential, therefore, that Hungary's citizen groups receive adequate financial resources to ensure their survival and growth. Such funds must be secured without compromising their political independence.

The people of Hungary must be prepared to weather the uncertainties and unpredictability of the nation's economic performance during this time of transition. Attitudes deeply planted in Western societies will not take root overnight. In fact, Hungarian attitudes, morals, and values likely will distort the new market economy and require a process of adjustment that may take decades to complete.

Hungary also will have to reckon with monopolistic state enterprises whose presence will persist, especially if substantial sums of Western capital are not forthcoming. These monopolies represent the core of Hungary's economy and cannot be eliminated until there is a system in place (with sufficient capital and expertise) to replace them.

Hungarians realize that democracy and capitalism are not panaceas for their environmental problems. But they are convinced such systems offer more hope than state socialism. In Western societies, problems are more likely to come to light before the damage is irreversible. Pluralism and democracy assure that many voices are heard and that environmental concerns are integrated into economic development strategies. These same goals will be at the center of Hungary's new environmental agenda.

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NOTES

1. This article is based on a discussion of 12 Hungarian environmental experts. The participants were: Istvan Ember, Institute of Public Health, Debrecen University of Medicine; Csaba Ferencz, Department of Geophysics, Eotvos Lorand University of Sciences; Lajos Gyorgy, Physician, Institute of Advanced Medical Studies and leader of the Eotvos Lorand University of Sciences Environment Protection Club; Sandor Kerekes, Department of Merchandise and Industrial Technology, Budapest University of Economics; Jozsef Kindler, Department of Company Economics, Budapest University of Economics; Tihamer Kiss Keve, Danube Research Station, Hungarian Academy of Sciences; Peter Sarkozy (*retired*) Department of Applied Technology, University of Horticulture and the Food Industry; Viktoria Szirmai, Institute of Sociological Research, Hungarian Academy of Sciences; Janos Szlavik, Department of Environment Conservation, Budapest Technical University; Tibor Varkonyi, National Public Health Institute. The discussion was led by Peter Hardi, Director of the Hungarian Institute of International Affairs.

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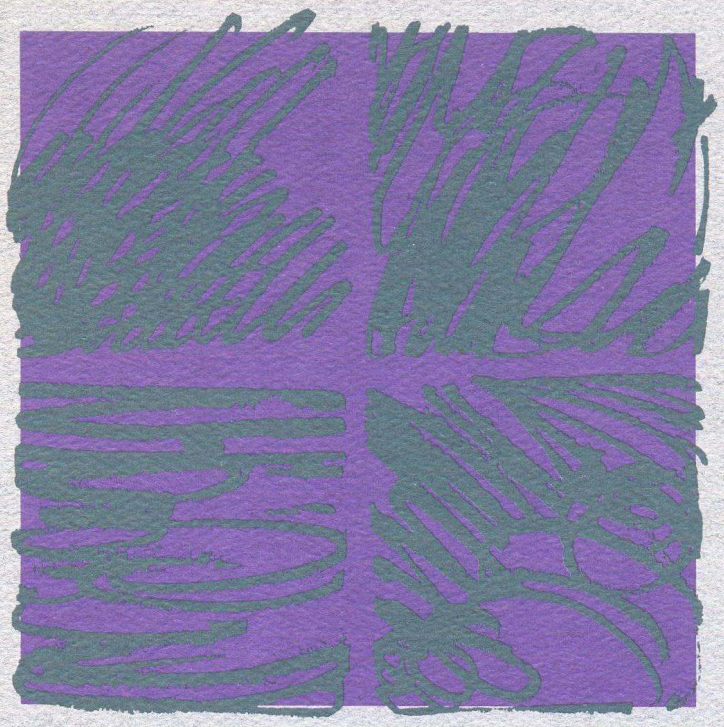

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