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Fighting Pollution in Vietnam

by David Malin Roodman

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A third of the world's people live under regimes that have little tolerance for NGOs, but many of them still find ways to take action in defense of their environment. How they do so may vary widely, however, in accordance with the kind of environment they have—and with the ways in which they have traditionally related to that environment and to each other.

by David Malin Roodman



I came from the beautiful water to Vietnam, and lived there from October 1998 to June 1999. While I was there, a quiet war simmered between the government and its domestic critics.

Around the time I arrived, the government put the former editor of a Ho Chi Minh City financial newspaper on trial for “abusing freedom and democratic rights to violate the interests of the State”—that is, publishing evidence of corruption among customs officials. In January, the Communist Party expelled elder statesman General Trần Độ for slipping pro-democracy manifestos to foreign reporters. Then the Venerable Thích Quảng Độ was detained and questioned after he met with fellow monks of the banned United Buddhist Church. He had been released from his latest jail term just before I arrived, but the government still held as many as 56 prisoners of conscience at the start of 1999, according to Amnesty International. The Vietnamese media either ignored these events or firmly sided with the government and attacked those who were fomenting “peaceful evolution”—that is, change without bloodshed.

I was curious about what Vietnamese thought about these events, but didn't feel that it would be safe to ask. To do so would have been to risk a quick expulsion from the country, and trouble for my Vietnamese relatives. My wife Mai was born in Saigon.

But it turned out that there was another quiet war underway in Vietnam. And this one I could investigate. Each year, I learned, thousands of Vietnamese citizens file complaints against factories for polluting near their homes. Some organize and take their protests straight to the factory gates. They complain about government cement plants that belch soot into the country air, and about home-based welding operations that send noise ricocheting through tight urban alleyways. Muckraking journalists have joined the fray, writing name-naming articles. And in response, government environmental inspectors devote much of their time to visiting factory operators and pressing them to cut emissions.

As in most developing countries, and many industrial ones, factories in Vietnam commonly violate national pollution standards—which in this country were established only five years ago and therefore are

less established than many of the plants they apply to. The country is of course industrializing headlong. In such a growth-fevered environment, public criticism, widespread though it is, has often not had much effect on factories. But in those cases where companies have improved compliance, public pressure has frequently played a role. "Bottom-up" pressure from neighbors and journalists, in other words, appears to be affecting industrial polluters at least as much as conventional, "top-down" regulation from government agencies. Studies suggest that public criticism of polluters is also widespread in Indonesia and China.

The strength of public criticism in Vietnam seems remarkable under a government that does not blink at jailing people for saying what they think. Repressive regimes tend to quash activist groups of the sort that have proliferated in more democratic countries, and that we normally think of as the "civil society" or "NGO" (nongovernmental organization)

sector (see "Action on the Front Lines," page 12). Yet, judging by the results, public pressure is performing functions in Vietnam that are performed in many countries by NGOs.

But what's most significant about this upwelling of public criticism may not be its modest successes to date so much as where it could lead. Reactive criticism of government and corporate decision making today could become proactive participation a decade or so from now. The result would be a much more powerful force for protecting people from pollution. That possibility, I believe, can best be understood as a product of Vietnam's history.

Since far back in the mists of time, according to Vietnamese mythology, the monsoon god has thundered against the mountain god in an endless battle over the beautiful daughter of King Hùng Vương. Every year the monsoon rains eroded the mountains and fed the rivers that washed the mountain's miner-



als down to the sea. Near the coast, where the river branches flattened and slowed, the sediment settled out, gradually filling the channels. As each branch rose over the years, decades, or centuries, it pressed against its banks, until one day it burst through and found a new route to the sea. Thus did the mountains and the monsoons cooperate to feather sediment across a vast, flat expanse, what is now the Red River Delta in northern Vietnam.

Some 4,000 years ago, the ancestors of modern Vietnamese brought a brand of rice farming to the Delta. Bit by bit, like all successful farming peoples, they industrialized nature. Harnessing water buffalo and irrigation, they cleared the Red River Delta of its natural biota in order to mass-produce rice. In the

it their first time back since the family fled in a cargo plane a week before the fall of Saigon in 1975. Together, the four of us physically retraced the family's past. First we stayed in Saigon (now Ho Chi Minh City), where Mai's parents had arrived independently in 1954 as the country was partitioned in the wake of the French withdrawal. Then we traveled to Hanoi and to the northern countryside, where her parents were born.

It was here that I was privileged with my closest glimpse of the traditional heart of Vietnam, in the village of my father-in-law's birth. The driver of the minivan in which Mai and I were riding with several of our relatives stopped along a road surrounded by rice paddy, right where a ridge about twice the

breadth of my shoulders shot toward a cemetery. We clambered out and looked around. Most of the land, except for houses, cemeteries, and a network of roads and paths, was submerged. The water and the sky, both slate-gray, met at the horizon along misty tree-lined ridges, and a bleak rain pattered the water and turned the ridges to mud. Despite the cold, women in pajamas and conical straw hats worked quietly in the fields, hunched so that the water reached their wrists and calves. On this day at least, the water felt oppressive and massive. No wonder, I thought, that Vietnamese do not call nations "lands." They call them "waters."

After paying respects at the ancestors' graves, we walked to a one-room, three-walled house in the village. Some 40 people—probably a

good fraction of the population—waited there. Apparently, all were related to me two or three generations back. As my relatives introduced themselves, they explained which pronouns to use to address each of them, and what to call myself in doing so. Vietnamese has easily a dozen pronouns for family members—nephew or niece, younger sibling, older brother, mother's younger brother's wife, and so on.



most recent millennium, the rice farmers and their communities spread south, first along the narrow strip of flat land between the Central Highlands and the South China Sea, and then into the bounteous Mekong Delta, giving the nation its modern shape, like two rice baskets hanging from a shoulder pole.

The day I glimpsed where it all began was cold. My wife's parents had returned to Vietnam, making

A simple “I” or “you” is rude among family, for it communicates that one sees oneself as free from obligations of respect and caring inherent in being part of a traditional family. It conveys what Communist cadre call “excessive individualism.” Through the introductions, I came to feel that all 40 people in that house saw themselves as tightly interconnected with each other, and that they derived security and identity from knowing their place.

Since that visit, it has occurred to me that my two overriding impressions of the village—of the water and of the social structure—may be related. Perhaps nature has shaped culture. More precisely, perhaps how people interact with the natural environment has affected how they interact with each other—and how as individuals they perceive themselves in relation to the community.

In northern Vietnam, and probably in much of East Asia, wet rice agriculture draws neighbors into a tightly woven fabric of interdependence. Rice growing can feed dense populations, so people live elbow to elbow. A pest infestation in one field threatens those nearby, so villagers aid each other in fighting them. And rice growing requires two plantings, first in a nursery field, then in a larger one to mature. The window of opportunity for transplanting is perhaps a day wide, so neighbors sometimes assist each other when each plot’s day arrives—leading them to coordinate and stagger their plantings.

But it may be the use of water that ties people’s lives together most tightly. Communities cooperate to build and maintain irrigation ditches. And they often have to carefully share the water itself, since there might not be enough to quench every field every day. Or in some places, in order to save the time and space consumed by canal construction, neighbors share water by laying out their fields in almost imperceptibly sloped cascades. Farmers cut breaches in the low mud dikes between fields, so that one family’s water comes from another’s field.

The interdependence inherent in wet rice farming probably helps to explain why many East Asian cultures so prize harmony within relationships. Comity could be a matter of life and death: offend your neighbor today, lose your water tomorrow. Cultures adapted to these circumstances may define good families and societies as ones that are strongly structured and good people as those who live up to the obligations of their positions within those structures. This linking of economic necessity and social definition may parallel, while starkly contrasting with, the way in which Americans, children of centuries of capitalism, see the world in tints of individual achievement, gain, and competition. In the traditional life of northern Vietnam, one’s place in society and sense of self were defined more by obligations toward others than by rights (which can be seen as limits on oblig-

ation toward others). The obligation of the son toward the father was to show him respect and defer to his judgment. Neighbors were to strive to maintain the appearance of harmony. When disputes arose, showing anger caused everyone to lose face.

The genes of the rice plant, then, molded traditional societies in the East Asian rice basket with the strength of a potter’s hand. But of course East Asian societies are diverse—each one came off the potter’s wheel unique. And the confrontation with the West has called the old rules into question and thrown these societies into centuries of tumult. The guarded admiration many Vietnamese now feel for the West is perhaps captured in one of their names for America, *Mỹ*, which means beautiful. (Thus did I come, in their words, from the beautiful water.) So while East Asian societies are still unmistakably East Asian, the influence of their cultural inheritance on their responses to modern challenges is tempered. It’s an influence that is as subtle as it is pervasive.

One of those modern challenges is the conflict between people and pollution, which in Vietnam has been rapidly intensifying. The majority of Vietnamese were born after the War, so this is now a young country with considerable demographic momentum: a lot more babies are about to be born. Vietnam already has 80 million people (making it the thirteenth most populous nation) and is projected to have 125 million in 2050. With just 20 percent of Vietnamese living in cities today, and with little space for farming to expand in the countryside, it is hard to foresee anything short of a tripling of the country’s urban population in the next half-century.

Factories will probably multiply at least as fast. Since 1990, industrial output has doubled, adjusted for inflation. Heavy industries, such as coal mining, chemicals, and paper and pulp generate half the current industrial output and probably most of the pollution. The technical knowledge and money needed to invest in pollution control are scarce. According to a 1997 survey by the National Environment Agency, of 9,384 major business sites nationwide, including everything from hotels to mines, half were violating the 1993 Law on Environmental Protection.

When I talked to experts about how Vietnamese society is responding to its burgeoning pollution problems, I was frequently referred to the work of Dara O’Rourke, now an assistant professor at the Massachusetts Institute of Technology, who has studied public pressure on industrial polluters in Vietnam. In a forthcoming book contribution, O’Rourke describes his visits to several sites of controversy. One was a community in the industrialized province of Đồng Nai just outside Ho Chi Minh City, in which the Dona Bochang textile factory, a joint venture between the provincial government and a Taiwanese firm, had been sending a plume of dust over the



WOODCUT ABOVE AND ON PAGE 29 BY PHAM NGUYET NGA, A HANOI-BORN, SELF-TAUGHT ARTIST.

dense neighborhood built up against the factory's walls. The neighborhood, including an open-air church that is now adjacent to one wall of the factory, is inhabited mainly by Catholics who fled south in 1954, like Mai's parents. After the Communist government took power in the South too, it took control of the national Catholic hierarchy. But in campaigning against the pollution from Dona Bochang, the local community, with the church at its center, seemed unintimidated:

The community around Dona Bochang is strengthened by social relationships built up over 40 years of church organizing.... One family stood out as leaders of community action. They had collected a thick file on the factory's pollution, including press clippings, letters they had sent to various government agencies, the responses they had received, and photographs of pollution impacts. They regularly drafted letters for others to sign. They had been on the official delegations to the factory and to government meetings. They had even made a video of the pollution.

The catalyst for action had come in 1993, when a belch of soot coated trays of food laid out for a wedding reception at the church:

Community members considered this the last straw and marched to the front gate and threatened to tear down the wall and shut down the factory if the manager did not come out to talk to them. . . .

[A] factory representative asserted that the factory was doing all they could and promised the problems would be solved. The community forced the manager to sign a statement attesting to the level of pollution. Photographs were taken. Several months later, when nothing had changed, the community brought their complaints, the pictures, and the signed statement, to the Dong Nai Department of Science, Technology, and Environment (DOSTE) and the media. . . .

The DOSTE responded...by organizing an inspection team and several meetings between community members and the factory. . . . The community criticized the inspection process, charging that because it was a planned inspection, the factory was able to turn off the polluting equipment before the inspectors arrived. Community members argued that their daily experiences were more accurate than the data collected from the inspection. Later, when pollution levels resumed, the community sent more written complaints to the government and the media. This renewed pressure motivated more meetings, and finally resulted in the factory agreeing to install equipment to reduce its emissions.

The community pressured the company three more years before it fulfilled its promises, after which emissions slowed significantly.

Nor have government-owned companies been

spared the sting of public censure. O'Rourke relates how neighbors of the giant, state-owned Lâm Thao fertilizer factory in the northern province of Phú Thọ, along the Red River, mounted a sustained campaign against the factory for piping acid wastewater into their rice fields. The people won \$80,000 in damages in 1997 alone (a huge sum in a country where per-capita income averages \$350) and got the company to build diversion and treatment works.

Numbers I saw suggest that acts of criticism like those in Đồng Nai and Phú Thọ are widespread, though how many achieve success is less clear. Environmental offices in Ho Chi Minh City received some 1,000 complaints a year in the mid-1990s. The Hanoi city environmental office told me it gets one to three complaint letters a day. At the Vietnam Cleaner Production Center in Hanoi, a U.N.-funded, Vietnamese-run source of technical advice for companies wanting to cut emissions, almost all of the clients have approached the center in response to citizen complaints.

Vietnamese reporters have joined the chorus of public criticism. In the mid-1990s, for instance, two newspapers affiliated with the official Youth Union became leading critics of the giant monosodium glutamate plant operated by VEDAN, another Taiwanese company in Đồng Nai. The plant was poisoning the Thị Vải River with untreated organic waste. In response to a barrage of newspaper articles and subsequent pressure from government officials, the company first dumped the waste at sea, then, when that only inflamed the critics, delivered it as "fertilizer" to Tây Ninh Province near Cambodia, where some of it was dumped into unlined B-52 bomb craters. Finally, the company installed a wastewater treatment plant.

So in a country where monks are jailed for meeting with their brethren, newspaper editors have safely exercised the power of their presses to prod government officials into doing their jobs. And Vietnamese citizens have directly criticized state-run companies and earned not retribution but compensation.

What explains this paradox? I believe that a sort of bargain has been struck between the rulers and the ruled in Vietnam. The deal is this: the Communist Party, through the government, will set society's moral compass. Citizens and reporters may criticize others for deviating from that compass heading, *but they may not publicly question the heading.*

As with any deal, this one arises from certain cultural assumptions about how things should be done, as well as the power that each side has historically brought to the negotiating table (with the Communist Party clearly bringing more). The cultural assumption in this case is that a nation can be seen as a sort of North Vietnamese supervillage or superfamily, in which government, religious organizations, businesses, and the citizenry all have well-defined

roles and responsibilities. In Vietnamese tradition, the role of government, the metaphorical father, was to manage society according to universal laws of harmony. The role of the people, the metaphorical children, was to accept the king's direction. This was the express view of Confucius and it held sway among many Vietnamese well into the nineteenth century. They believed that if the king failed to divine the laws of harmony and conform society to them, he would lose the Mandate of Heaven, and calamity—flood, famine, or war—would follow.

The Communist Party won the war, and has held the peace, in no small part because of the ways in which it adapted the vision of nation as family to modern Vietnam. To an extent the ancient kings could only have dreamed of, the Party has drawn the country into an embrace almost as firm as that of the traditional village and family. During the war, for example, it created a Youth Union with chapters in each village to prepare young people to become soldiers. A Women's Union organized women to shelter and care for soldiers in the their village. And a Farmer's Union helped feed them. Later, the state would control industry, religion, and education.

But extending this model also strained it. In the northern Vietnam of the past, the powerful sense of solidarity within a village was often matched by skepticism, fear, resentment, even hatred of outsiders. Chinese colonization of Vietnam for a thousand of the last two thousand years, followed by a century of French occupation, inflamed these feelings. Anthropologist Neil Jamieson, in his respected *Understanding Vietnam*, writes that traditionally, northern Vietnamese expressed their attitude toward the outside world by ringing their villages with stockade fences, and by tightly controlling who entered the gates.

Thus from the start of their efforts to extend the psychological solidarity of the village to the nation, Communists had to contend with the contradictory flip-side of that psychology: strong provincialism. Their survival depended on handling this contradiction. In her 1972 book *Fire in the Lake*, Frances FitzGerald points out that since Communist cadre were so poor, unlike their French, American, and Southern Vietnamese opponents, they depended on locals for food, shelter, intelligence, and secrecy—in a word, for their lives. The Party could sustain popular support only if it overcame the deep-seated skepticism of higher authority and won the support of locals for a national cause.

This it did in ingenious ways. Ideologically, Hồ Chí Minh and his followers brought a revolutionary innovation to the traditional vision of government: they replaced the Will of Heaven with the Will of the People. Good rulers still held all the reins of government and claimed the authority to define right and

wrong, but took the needs of the masses rather than the texts of Confucius as their guide. If they failed, calamity would follow.

Practically, the Communists developed several tactics to strike a delicate balance between central control and grassroots responsiveness. Among these was to subject soldiers and low-level political officials to criticism from villagers. "If a Party member or cadre makes a mistake he will be freely subjected to the criticism of the people. When the people can boldly criticize Party members they will then be ready to forgive," wrote one cadre.

There was an element of clever repression in this technique, for it set people to reporting on one another. Still, the national constitution and the Law on Environmental Protection, the spine and skeleton of Vietnamese environmental policy, have carried the wartime bargain implicit in public criticism into peacetime. One of the most important passages of the law reads: "All acts causing environmental degradation, environmental pollution or environmental incidents, are strictly prohibited." This is the crucial compass setting, with which the government legitimizes environmental concerns. It is hard to see why a government bent purely on controlling the populace would take such a stand. The concession to public participation, however limited, is real.

Uncorking public criticism has, I believe, allowed bottom-up pressure from citizens to play at least as big a role in pollution policy as has conventional top-down regulation. The same may hold true for other Asian nations. Still, public criticism as it currently operates is no cure-all for Vietnam's pollution problems. Foremost among the limitations of criticism is that it is just that: criticism. It lacks the bite that regulations ideally have. Several Vietnamese told me that VEDAN, the Taiwanese MSG maker, probably idles its new wastewater treatment equipment most of the time, despite the furor that led it to install the equipment. Meanwhile, criticism from local citizens and national papers seems not to have perturbed the Hiệp Phước power plant in Ho Chi Minh City, a decades-old facility that Chinese and Taiwanese investors had transferred from Hong Kong, where pollution standards made its operation illegal. In search of a more forgiving regulatory environment, they had had the plant disassembled, packed onto barges, shipped across the South China Sea, and reassembled in Vietnam. These apparent failures of public criticism, like the successes, are not unusual.

The case of Lâm Thao, the state fertilizer factory on the Red River, points to another shortcoming of public criticism as a tool: poorer or less educated people use it less, though they may more often be victims of pollution. The Lâm Thao plant harmed two communities. The one next to the plant, which was mainly affected by wastewater, was the better educated

and wealthier of the two. Residents there grasped the implications of the LEP, pressured the company and the government hierarchy to enforce it, and won substantial compensation. But the community across the river from the plant, which was mainly affected by the intensely acidic air pollution, was extremely poor, lacked electricity, and suffered from high child malnutrition. People there complained relatively little, and have won little improvement or compensation.

Public criticism has also been skewed in its focus on acute, visible pollutants like soot, to the neglect of those that pose longer-term, less visible threats such as those of heavy metals, which gradually accumulate in the fatty tissue of people and animals. Moreover, public criticism in Vietnam has shown little foresight: it reacts to problems after they occur rather than heading them off beforehand. Yet prevention is far cheaper than cure.

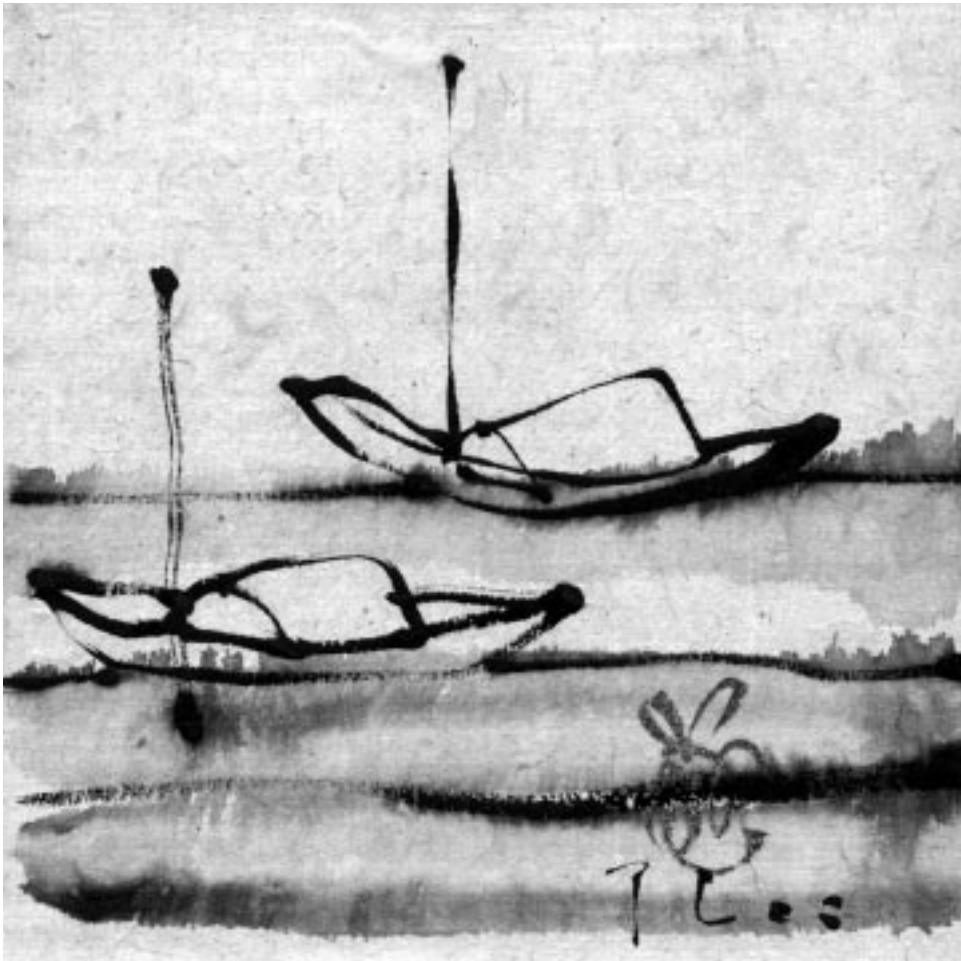
These shortcomings suggest that the greatest significance of public criticism in Vietnam, as well as in China, Indonesia, and other nations where it has taken on a life of its own, lies in what it could become. Public criticism as an institution is a foot in a door that opens onto a broad range of forms of public participation in government decision-making.

In Vietnam, for example, the government could someday collect and release data on emissions of chemicals from each plant in the country, much as United States now does with its Toxics Release Inventory, to educate people about invisible pollution threats. And it could require companies to make public the environmental impact assessments (EIAs) they do for new projects, and even to submit those EIAs to public hearings. Vietnamese law currently shields EIAs from scrutiny. Some officials worried aloud to me that most Vietnamese lack the education to critique EIAs. But if people can usefully criticize a factory after it starts operating, then it should be possible for them to usefully criticize it before. Experience in many countries suggests that the key lies in how governments talk to and listen to local citizens. Governments can, for example, provide information about plans and likely impacts in terms citizens can understand, and create forums in which citizens can easily express their views—perhaps orally.

Westerners may assume that the totalitarian Vietnamese government would never yield such initiative to the people. But long-time Vietnam watchers know the truth isn't that simple. Indeed, the current prevalence of public criticism is one

sign of that. The most momentous event in Vietnam since the wars, the government's decision to abandon pure Marxism in the 1980s and yield ground to the market, may have been driven far more by bottom-up pressure than top-down direction, argue economists Adam Fforde and Stefan de Vylder. The government may have enacted the reforms mainly to accommodate the on-the-ground reality that farmers and factories were wheeling and dealing in violation of economic plans as a matter of survival. Had the government done otherwise, it might have jeopardized its own legitimacy.

An official from

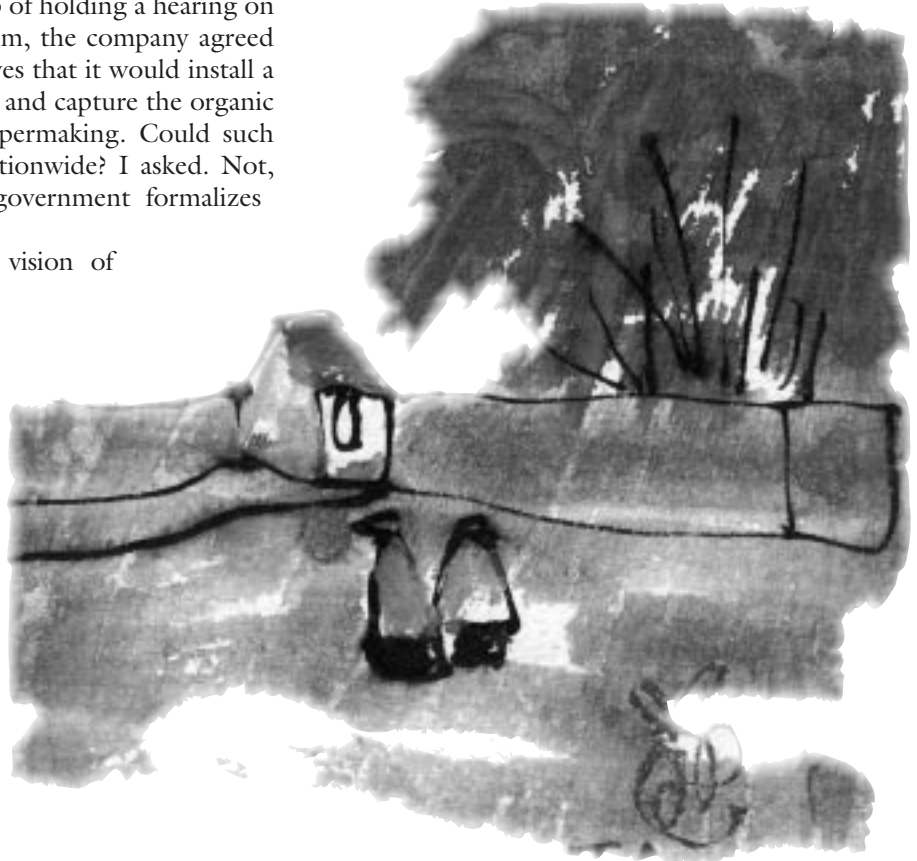


Khánh Hoà Province told me a story that suggests that within the environmental realm too, further state accommodation to public pressure is conceivable. Recently, in the province's district of Cam Ranh, the government sugar company began clearing land to build a new refinery. But locals knew that many such refineries are major water polluters, and feared this one would destroy their crops. Some locals visited managers of the company, and protested so strongly to the local People's Committee that it took the extraordinary step of holding a hearing on the plant's EIA. In this forum, the company agreed with the citizen representatives that it would install a wastewater treatment system and capture the organic residues as feedstock for papermaking. Could such hearings become routine nationwide? I asked. Not, he said, until the central government formalizes them with new rules.

As I listened, I had a vision of Vietnamese society as a delta, and the force of history as the river that makes the delta. Attempts by foreign and Vietnamese governments to dam the river, to halt the organic development of the delta, have succeeded for a time—but only for a time. Sooner or later, the dams always burst. By inviting criticism of polluters, the government of Vietnam has wisely accommodated what is evidently a well-

spring of civic energy within the nation. But the current is bound to build as the country develops. To maintain its legitimacy, the government will need to let the current find its natural course.

David Malin Roodman is a senior researcher at the Worldwatch Institute. He was on leave from Worldwatch during the 1998–99 academic year in order to take up a Fulbright scholarship in Vietnam.



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