PLUNDERING PARADISE

The Struggle for the Environment in the Philippines

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WITH

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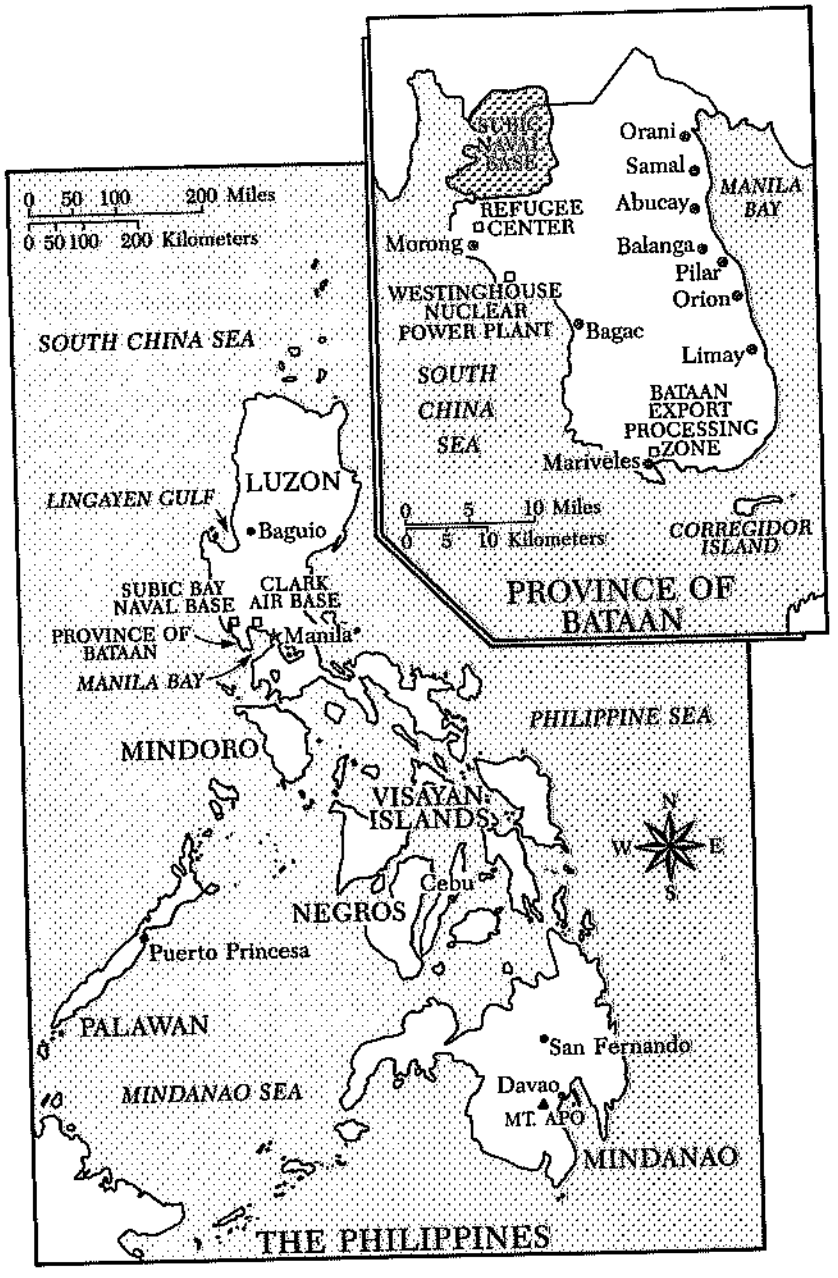
For our parents



Chapter One

Generation Lost

The ultimate aim and measure of . . . real development is the enhancement of the capacities of the poorest, their health and nutrition, their education and skills, their abilities to control their own lives, and their opportunities to earn a fair reward for their labours. This is the kind of development which the majority of people in the poor world seek.

UNICEF, *The State of the World's Children* 1989 (New York: Oxford University Press, 1989), p. 36

I am terrified for the future of my children. How can they survive in this kind of situation? What can they look forward to? . . . But in the end, we must keep on hoping and working.

Dr. Leonor Briones, president of the Freedom from Debt Coalition and professor at the University of the Philippines, personal communication

We travel to the Philippines to learn what has become of one of the world's most bountiful paradises, a country that recently boasted spectacular tropical rainforests and coral reefs teeming with colorful exotic fish. We come to spend time with participants in a new brand of environmentalism that is springing up here as the natural resources are being torn down.

We leave our native United States at a moment when an increasingly vocal and powerful environmental movement is stimulating widespread concern over greenhouse-gas emissions, ozone depletion, toxic wastes, species extinction, and, ultimately, the fate of the planet. We are traveling to a country where another environmental movement—of poorer people whose very existence depends on forests, fisheries, and fertile lands—is on the ascent.

We are entering a country of environmental ruin, a country where the lives of peasants, fishers, and others are being altered drastically by the sudden human devastation of millennia-old environments. And this devastation is also uniting its victims to act in

defense of nature and, ultimately, in defense of their children's future.

Our goal is to learn about these actions and to share the lessons from them with others in the United States. But understanding the actions first requires understanding the people and some of the obstacles they hurdle daily in their efforts to survive.

It is the children of the Philippines we notice immediately as we drive from Manila's Benigno Aquino International Airport into the city. And it is their images that haunt us most when we leave. As we wend our way through the narrow, noisy, fetid streets, we see children everywhere. Children bathe in public faucets. Nude and nearly nude toddlers scamper around. Brothers and sisters little older than the babies chase after their younger siblings, scooping them up and carrying them back to the small shacks that line so many of Manila's streets, shacks built of old wood planks or pieces of cardboard or scraps of indefinable origin.

The children's images haunt us because so many of them are doing what children should not have to do: they are at work. The stoplights at Manila's grimy intersections have become a popular children's workplace. At a minute-long red light, children swarm onto the road. A small boy sells cigarettes by the stick: Philip Morris, Marlboro, and the rougher local brands Champion and Hope. He carries them in a homemade wooden box, almost as big as he, that has other small compartments for the Wrigley's chewing gum and menthol candies he also sells by the piece. He and a handful of other boys laden with candy, cigarettes, or a few of the country's two-dozen-odd newspapers race from vehicle to vehicle to hawk their wares at each window.

Still another boy jumps onto an automobile hood and begins to wipe the soot off the windshield, hoping that if he acts quickly enough the driver will feel obliged to give him a few coins. Some girls stand between the lanes of traffic selling scraps of cloth stitched together into multicolored, pancake-sized circles, used by drivers to wipe sweat from bodies and grime from steering wheels. Three circles can be bought for a peso (just under 5 cents in the late 1980s; around 4 cents in the early 1990s).[1]

Young girls hawk wreaths of fragrant *sampaguita* flowers, to be hung from rearview mirrors in an attempt to camouflage the suffocating fumes of low-grade diesel fuel: three wreaths for 5 pesos. "Please, ma'am, I'm tired," becomes the sad plea late at night as the traffic snarl slows and the price goes down. "Two more sales and I can go home."

The steady workers at the intersection half a block from where we live in Manila slowly become etched into our consciousness. Day in and day out, a girl who cannot be more than nine leads her blind father to the vehicles stopped at the red light. He keeps one hand on her shoulder; the other hand, guided by hers, silently reaches out to the vehicle windows. Just as silently the young girl, her eyes mournfully beseeching, patiently positions and repositions the begging hand from driver to passenger, vehicle to vehicle.

Three scrawny, ragged children who appear to be a family team work on the other side of our street corner. The oldest one, certainly under ten years of age and perhaps no older than seven, is the mastermind of the enterprise. He generally stays on the side of the road. Understanding that there will be more sympathy for the smallest, he pushes his younger brother and an even younger sister, a toddler still, onto the teeming street as the cars stop at the red light. As the light turns green, the two scurry back to him. He puts his arm around them, assessing that red light's pickings and psyching them up for the next one.

The only significant change in the red-light economy occurs at Christmas time. Then the regular inhabitants are joined by migrants from the outlying provinces. Withered, dusty women carry sleeping infants. The woven fabric draped around their waists as skirts identifies them as indigenous Filipinos from the north. Each woman cradles an infant who seems never to wake in the noise and tropical heat; each holds out her free hand, hoping for charity. With their sunken cheeks and sagging bodies, the women look as if they have lived far too many years to be the mothers of the children; but they claim they are. Aggressive sales pitches, vital to success at the intersection, are foreign to the Philippine culture. Yet the women somehow muster their courage again and again, at times not merely extending their begging hand but actually poking the people in the vehicles.

One day we go around Manila trying to estimate the number of children who work at the intersections. We soon give up: too many

to count, and too much pollution. Other researchers' estimates of the number of street children vary widely, from a conservative figure of 75,000 in Manila to as many as 1.2 million found nationally.[2]

We are haunted by the children because their lives and prospects constitute for us the most damning indictment of the development strategy followed by the Philippines. In brief, the majority of Filipino children have no choice but to spend their childhoods denied most of the pleasures of youth; instead, they must work in employment that is more often than not undignified, demeaning, dangerous, or all three together. An eleven-year-old sugarcane cutter in the central Philippine island of Negros, when asked if he found time to play, put it starkly: "Play is only for rich children."[3]

As these child workers mature into adult workers, they will find few opportunities to shift to more meaningful, less demeaning, and less dangerous work in their own country. And those children who survive childhoods of sacrifice—of disease, hunger, and long hours of work—face another threat that has only recently entered the national consciousness: the plunder of the environment. In other words, not only are they living in a perilous present, they are being robbed of their future.

Whether or not they live on the streets, the majority of Filipino children must enter the labor market, despite an official ban on child labor. As Pratima Kale, UNICEF's representative in the Philippines during much of the 1980s, explains to us: "During the economic crisis [in the mid–1980s] and until now, the labor force has been swollen by women and kids. This is unprecedented in Philippine history." An estimated two-thirds of Philippine children work. Some are our street-corner hawkers and beggars. Some are self-proclaimed car-watchers, who will guard your parked car for a peso or so. Others stitch and embroider. Still others are domestic "helpers," the *katulongs*, *labanderas*, and *yayas*, who clean houses, prepare meals, wash clothes, and care for younger children.

We have also tried to calculate the earnings of the children at our street corner. A day's take varies widely, but it is clear that, be they beggars or sellers of wares, the children earn barely enough to survive. One study contended that children working as vendors and scavengers earn an average of the peso-equivalent of 50 cents daily. Another estimated that the approximately 5–7 million Filipinos between the ages of five and fourteen who work as hired hands on farms or in factories and sweatshops bring in as little as the peso-equivalent of 5 cents a day. Although such wages are only a fraction of the minimum wage for adults, the contributions of the children in the family can add up to some 30–60 percent of family income.[4]

When these children are at work or on the streets, their education suffers heavily. One government study acknowledged that 240,000 students, out of an average enrollment of 1,000,000 first graders, drop out during the four-year primary education course—in other words, 25 percent do not complete even those crucial first four years of schooling. One-fifth of these drop-outs revert to illiteracy. Another government agency calculated that 40 percent of students drop out before they reach high school.[5]

Outside Manila, intersections with traffic lights are few and traffic is sparse. Yet, wherever we go, we find children at work. Perhaps we should not be surprised. After all, the Philippines is a poor country. As the first sentence in a confidential version of a 1988 World Bank report on Philippine poverty stated: "The Philippines is the only [Southeast Asian] country where the average living standard is declining and the number of people living in poverty is increasing."[6] If you randomly select ten Filipinos, you will find that somewhere between five and seven of them have incomes below the poverty line.[7] In addition, the Philippines is a land of children: five of the ten will be under twenty years of age.[8] This combination of poverty and youth accounts for the number of working children.

We travel north from Manila to Baguio, the so-called summer capital of the Philippines.[9] Baguio's location high in the mountains makes it cool enough to support pine trees and to offer a welcome respite from Manila's stifling heat—although the pine trees are disappearing as the city expands. Those few Manilans who can afford it have second homes in this "City of Pines," to which they retreat during the steamy tropical summers. (It was U.S. colonial officials stationed in Manila who conceived of Baguio; it was Americans who engineered the steep road that winds around the mountain to reach the city; and it was an American who designed the city—although it was Filipinos who built, and whose taxes paid for large parts of, the enterprise.)[10]

In Baguio, we go to Mine's View Park for a stunning view of the majestic Cordillera Mountains, marred only by several barren patches that are the legacy of decades of logging and mining. But as

we join other foreign and Filipino tourists at the park's crowded circular viewing stand, we find it hard to concentrate on the admittedly grand panorama. We, the tourists, gather at the edge of a steep cliff, well protected by guardrails. On the rocky cliff below the guardrails stand a dozen or so of Baguio's young children; safety precautions are meant for tourists only. The sport at Mine's View Park is this: a tourist throws a coin (typically a 25-centavo piece, worth about a penny) over the guardrail, and the youngsters dash across the rocky ledges to catch it in a handmade, mitt-like cardboard container at the end of a long pole. Tourists, both foreign and Filipino, watch as if observing elephants at a zoo catching peanuts thrown by the crowd. The tourists appear to take delight in flinging coins to the most precarious part of the cliff. They cheer as the first child scampers to the spot in time to catch the falling coin.

Various permutations of this scene greet us at tourist spots throughout the country. As we head south from Manila to the island of Mindoro, we come to realize that at least a touch of danger seems to be key in devising employment opportunities that transform children into tourist attractions. To get to Mindoro, you take a bus to the port of Batangas, and then a boat to the tourist town of Puerto Galera. In Batangas, the interval between bus and boat has given rise to another child-intensive service. "Throw coins, Joe?" A young boy tugs at our sleeve. (To many Filipinos, all Westerners are "Joe," a remnant of World War II's G.I. Joe.) The child points to the murky ocean waters beside the pier, the stage for the Batangas version of the Baguio sport. Tourists throw coins into the sea and he and his companions dive for them, holding their breath for impressive stretches of time.

On the other end of the boat ride from Batangas, another type of child labor awaits us. Puerto Galera's beautiful natural harbor once sheltered Spanish galleons from typhoons. Today it is frequented by tourists for its beautiful white sand beaches—one complete with a floating bar. John takes a walk on another of the beaches. A boy of ten or so approaches him, smiles, and sits down on his lap. It is a slightly forward gesture for a Filipino child, yet the little boy is laughing a cute child's laugh and shyly asking where John is from. The two of them chat a bit in Tagalog: How old are you? What's your name? Where do you live? Idle chatter until a chilling realization hits: this youngster is propositioning John. This sweet little boy

is one of as many as 20,000 Filipino youngsters who survive by selling their bodies as child prostitutes.[11]

The prostitution of the "hospitality girls" who work in Manila's tourist district and for decades conducted business in the towns adjacent to the two large U.S. military bases in the Philippines has been well chronicled. (At this writing, the U.S. government has closed one base and announced that all troops will be out of the other by the end of 1992.) Still, we are not quite prepared for the sight of what has been called the "biggest brothel in the world."

Subic Naval Base, a couple of hours' drive northwest of Manila, has long been the main repair facility of the U.S. Pacific Fleet. A local women's center in Olongapo, the town adjacent to Subic, sets up our visit. Tetchie (not her real name), our guide, is a bargirl who, like most of the women in Olongapo's entertainment industry, comes from a poor rural family. She has the night off from the bar; in such "spare" time she volunteers at the women's center, explaining Olongapo to visiting students, social activists, and researchers like ourselves. The first stop on tonight's alternative tour of Olongapo is The Runway, the bar where Tetchie works as a waitress. How the bar got its name becomes obvious once we step inside: a dozen or so Filipinas stand on a low-budget version of a Miss-America-pageant runway at the center of the bar. They sway sadly and self-consciously to the blare of the music, tugging on their skimpy bathing suits in a hopeless attempt to cover themselves.

Like Tetchie, these are among Olongapo's 15,000–17,000 "hospitality girls" (prostitutes)—waitresses, cashiers, go-go dancers, and entertainers—who work in and around more than three hundred bars, massage parlors, and entertainment centers.[12] Some, such as the go-go dancers, receive a minimal wage. Many do not. Most of their earnings are made through their cut of the "bar fine" that customers who are interested in services beyond drinks and dancing pay to the bar owner. The law says hospitality girls must be at least eighteen years of age. Yet, it is not unusual to find girls who admit to being in their mid-teens.

Sometimes they are even younger. Two twenty-ish young men—stereotypic clean-cut U.S. farm boys, blonde crew cuts, blue eyes, freckles—are perched on bar stools in front of us at The Runway. Between them sits a young Filipina with hair that cascades over her chair and falls nearly to the ground. As we watch we realize she is a

mere child—twelve, maybe thirteen. Little attempt has been made to camouflage her youth. She wears rubber thongs, patched shorts, and a T-shirt that is much too big without being stylishly oversized. These are the clothes of a poor rural child. Her body, too, is that of a child; it has scarcely begun to develop curves.

But the two sailors amuse themselves with her there in the bar. One twists her hair into a knot and kisses her aggressively. She recoils in shamed laughter, as if she has never kissed this way before. His friend takes a turn, then the first grabs her again. They continue passing her back and forth until they somehow reach an agreement about whose she will be for the night. The loser walks away, and somewhat later the other two leave as a couple.

Tetchie, in her late twenties, tells us that there are about 3,000 abandoned street children in Olongapo, some of whom are Amerasian—referred to as "souvenir babies." Many of Olongapo's abandoned children become child prostitutes. Tetchie reminds us of a well-publicized case: in 1987, a twelve-year-old child prostitute from Olongapo died after an ovary became infected from a broken tip of a vibrator one of her foreign clients had inserted months before.

When people-power toppled Ferdinand Marcos and brought Corazon Aquino to power in February of 1986, hope was engendered that life would improve for the children of the Philippines. Aquino had wooed crowds with promises of social justice and an end to corruption in this land of persistent poverty. For many of the 60–70 percent of Filipinos who still live and die in the countryside, it was Aquino's campaign pledge to land reform that inspired the most optimism. As U.S. government land-reform advisor Roy Prosterman said of the situation: "The Philippines has one of the worst land-tenure problems still found on our planet. Two and one-half million out of the Philippines' four million agricultural families make their living primarily on land that they do not own, as either tenant farmers or agricultural laborers."[13] In other words, as a World Bank study on the Philippines concluded: "A fundamental cause of rural poverty is the distribution of land."[14]

You need only drive an hour and a half north of Manila to understand why public cynicism about Aquino's commitment to social

reform grew over the course of her six-year term. Here, in the province of Tarlac, is the sprawling, over 6,000-hectare sugar plantation of Corazon Aquino's family, the Cojuangcos' Hacienda Luisita. In 1987 a vastly watered-down land-reform provision passed the Philippine legislature, a body more than three-quarters of the members of which are peso-millionaires and many are large landowners.[15] The land-reform bill that emerged is biased in favor of landowners, as is reflected in one of its numerous loopholes: the corporate stock-sharing program allows landowners to avoid selling their land by instead distributing corporate stock to their workers over a thirty-year period. As time for implementation of the reform arrived, all eyes turned to Hacienda Luisita. Following the letter of this loophole, the Cojuangcos finessed Hacienda Luisita's reform so that the 7,000 regular workers would, over the thirty-year period, receive only one-third of the shares. The Cojuangco family would be left with the majority share—and guaranteed control of the estate.

In mid–1989, we visit the plantation's migrant sugarcane cutters in their living quarters, hot, cramped, cardboard-partitioned pens in huge, open barracks. Children wearing rags and the vacant stares of malnutrition gather around us. The Hacienda Luisita Corporation provides us with a guide to help us understand what we see. Now our guide explains why the children's pathetic state is not the Cojuangcos' fault. The approximately 3,000 cane cutters are casual laborers, imported from the poorer parts of the Philippines for four to five months a year to augment the labor of the "regular" workers at the plantation. The plantation contracts and pays for the migrant husband's labor. The wage, our guide explains, is enough for the husband's subsistence; the plantation owners should not be blamed if the casual worker breaks the rules by bringing along a wife and kids.

Life for the regular workers is slightly better, for they receive higher wages and more than temporary employment (and, of course, that corporate stock). Even then, however, the wages are barely adequate to support their families. "Nutrition here is still below par," admits a plantation doctor. The doctor shares with us the results of a nutritional survey that weighed 65 percent of the preschool population of five barrios where the regular workers live.

Over half of these children suffered from serious malnutrition that will stunt the mental development of many, crippling them throughout their lives.

We drive around the cane fields and watch the workers toil. We spot some small figures carrying huge loads of sugarcane under the broiling sun. "Do the children work in the fields?" we ask the plantation official. "Some younger members of the family might be helping," he replies, but they "are not formally on the payroll."

Nearby, the quarters of the Cojuangco family's forty-odd race horses and the eighteen-hole golf course ("only the best," we are told) appear grotesquely plush by comparison. Imelda Marcos's infamous 1,200 pairs of shoes find their counterpart in the 6,000 fighting cocks (cockfighting is a leading legal gambling activity in the Philippine countryside) of Aquino's brother, each cock living under its own tiny roof on the hacienda's grounds. Our guide brightens as we change the conversation from the children's hunger to the cocks' health. "We feed 'em vitamins," he says proudly, "Ben Johnson–style." These contrasting images sum up the priorities of Philippine development—well-fed, muscular fighting cocks and hungry, overworked children.

Corazon Aquino also promised the Philippines peace; she vowed to bring an end to the two-decade civil war with the nation's well-established insurgency. As she insightfully phrased it early in her administration: "The roots of the insurgency are in the economic condition of the people and the social structures that oppress them."[16] Indeed, during a short-lived ceasefire in late 1986 and early 1987, the two sides sat down to discuss paths to peace.

But not all were happy with the peace talks. To demonstrate their dissatisfaction with Aquino's pursuit of such a "soft line," segments of the government military attempted a series of coups against her administration. Six attempts failed to dislodge Aquino, but they succeeded in teaching her a lesson and changing the course of her administration. Among other de facto concessions to appease the disgruntled military, the government stepped up its counter-insurgency efforts in the countryside. Aquino rationalized her about-face in a speech to the Philippine Military Academy in early 1987: "The answer to terrorism of the left and the right is not social and economic reform but police and military action. . . . I

told you when we were discussing the peace initiatives that when they fail, as we feared they would, and when it becomes necessary to take out the sword of war, that I want a string of honorable military victories. I want this victory."[17]

One of the most visible of Aquino's all-out military campaigns took place in April, 1989, on the central Philippine island of Negros, an island whose sugar haciendas and gross inequalities have made it a microcosm of the yawning gap between rich and poor found throughout the archipelago—and an insurgent stronghold. On one side are the rich of Negros: the sugar *hacenderos*, who drive dazzling white Mercedes-Benzes and have buying habits that put Negros near the top of the country's charts for up-market Electrolux appliance sales. The hospitals of Manila are often deemed not good enough by the rich of Negros; some travel to the United States to give birth. On the other side, 90 percent of the people of Negros fall below the poverty line. Most of them will never see a doctor. Hunger and disease are all-pervasive. A United Nations Children's Fund (UNICEF) publication reported that, on the average, at least one child dies before the age of five in every sugar-worker's family in Negros; nearly one-third (29 percent) of the families lose two or more children.[18]

"Operation Thunderbolt," the April military assault, made matters even worse for the children and their parents. To avoid the massive bombings and helicopter gunship strafing of fields and villages, some 35,000 civilians were forced to evacuate their homes and settle temporarily in makeshift refugee centers. Although this form of "strategic hamletting" had been practiced regularly during the Marcos years, Operation Thunderbolt under the Aquino administration produced the single largest civilian evacuation in the Philippines since World War II. Measles, pneumonia, and gastroenteritis flourished in the crowded and unsanitary evacuation sites. Of the civilians in the temporary shelters, 280—mostly children—were dead within three months, the majority of them victims of malnutrition and disease. By mid–1990, a team of investigative reporters placed the number of children who had died at Operation Thunderbolt's evacuation centers at 257. Families buried one, two, sometimes three children. One grandmother buried five of her grandchildren. Journalist Malou Mangahas wrote, "The

children of Negros, they were dying three years ago from malnutrition and disease bred by poverty. Now, they are dying still from malnutrition and disease bred by poverty, but also by war."[19]

The children's deaths, the government claimed, were a "necessary social cost" of war.[20] But, even by the government's own count, Operation Thunderbolt killed more children than insurgents. It was, one evacuee sobs to us as she spoke of the numbness that set in as they saw tiny cardboard coffins lined up day after day, hard to "believe that Cory is on our side."

A UNICEF poster seems custom-made for the children we encounter during our travels in the Philippines. The poster, with a photograph of a wide-eyed young child, asks, "What would you like to be when you grow up?" The answer, in bold letters across the breadth of the poster, is jolting: "Alive." In our travels and conversations with poor Filipinos (who, remember, are the majority of the country's citizens) we ask that poster's question whenever we can.

And a slight variant: What do you hope your children will be when they grow up? With no pretensions of having carried out a scientific survey, we can relate the following: Farmers expect their children to be farmers. Fishers expect their children to fish. And workers hope their children will be able to find jobs. If they allow themselves the luxury of a wish for their progeny, it is hardly what one would term frivolous musing; if they dream, it is typically of schooling for their children and grandchildren.

Sometimes we cannot get a specific answer. "It depends," a woman in a rural town tells us as she adds another twig to the wood fire over which she is cooking rice for her family of five. One of us is holding her four-month-old on our lap. The other is on the dirt floor, playing with her toddler. Neither child wears diapers. (Even cloth diapers, we discover, are a luxury for the majority of Filipinos.) "Depends on what?" we ask. She chuckles. "On *suerte* [good luck] and *malas* [bad luck], of course." She laughs as she adds, "We all believe in *malas* and *suerte*. But if you don't work, you don't get *suerte*."

The problem is that you need *suerte* in order to find a job, the niece of a friend of ours laments. She is in her twenties and has just received her degree as a medical technician. She is smart and energetic and wants to work—and has a skill that presumably she could use productively in the Philippines. She would, on the surface, appear to be one of the lucky ones, one of those with *suerte*. And yet, she tells us, she is not. The problem is that she wants to stay and work in the Philippines. "I am from this country; my family is here; I want to work here." But she feels as if she is being pushed to leave her homeland in search of employment overseas—or, at least, that she has little choice. Her parents are not rich. In her initial years as a medical technician in the Philippines, her annual salary would be but a third of the amount she needs to repay one year of the debt she incurred for her schooling. And because so few jobs are available, it is next to impossible to get even such a low-paying one without the assistance of someone with influence—"a backer," as they say in the Philippines.

Like our friend's niece, some of today's children have *suerte* enough to be getting training that will enable them to become professionals: doctors and nurses, lawyers and teachers, engineers. Yet, ironically, like her, they are likely to find the jobs open to them so poorly paid or so scarce that many will join the 1.5–2.5 million Filipinos working overseas. The Philippine Nurses Association, for example, estimates that of 150,000 registered Filipino nurses, 90,000 are working overseas. This confers on the Philippines the dubious distinction of being the number one exporter of nurses in the world—and it is the number two exporter of doctors. Medical professionals are being forced out of the country, despite a desperate health crisis in the Philippines in which 30–40 percent of the need for nursing personnel is unmet, and despite the astounding fact that the majority of Filipinos live and die without receiving any kind of professional health care at all.[21]

It is not only the Philippine health-care system that suffers from this export of professional and high-skilled workers. We meet female college students who are majoring in education, not with dreams of one day becoming a teacher but because such a degree will be a useful credential in securing a job in Hong Kong—as a maid. We often hear stories of college-educated teachers who now work in Hong Kong and elsewhere as domestic servants and chambermaids. It is understandable, since they can earn over three times as much cleaning in Hong Kong as they can teaching in the Philippines. Yet, partially as a result of this brain-drain, the Philippine Department of Education, Culture, and Sports noted that it

was short nearly 45,000 elementary and secondary school teachers for the 1989 school year.[22]

Indeed, overseas work is perceived by many of the people we interview as the surest path to *suerte*. This becomes very clear to us during our stay in Bataan, a province a few hours' drive northwest of Manila. As the governor of that province tells us, "If you see a house of concrete [rather than wood, bamboo, or thatched palm leaves], you can be sure someone in the family is in Saudi Arabia or the United States." Or, as a mayor explains in response to our question about how any poor fisher in his town is able to afford one of the small but expensive wooden boats, "You know, there are many unemployed here, engineers, nurses, and many recent [college] graduates. But some are lucky, some have sons and daughters working abroad."

The people of Bataan who have such *suerte* are understandably proud to display it. "I ♥ Saudi Arabia," proclaims a bumper sticker on a passenger mini-bus. "Petro-Engineering International Saudi Arabia," brags the T-shirt of one of its passengers. Most common of all are decorative rugs hung on living-room walls. These rugs, brought home by workers from the Middle East, almost always depict a dog and a cat; a minority show mountains and lakes. But whatever they depict, they demonstrate that that particular household is lucky enough to have someone working in the Middle East.

Every year more than 700,000 new job-seekers are added to a Philippine labor force that already has some 6,000,000 underemployed and unemployed workers.[23] In the late 1980s, the many Filipinos working overseas were concentrated in Saudi Arabia, Japan, Hong Kong, the United Arab Emirates, Kuwait, Taiwan, Australia, and the United States. The exodus to the Middle East started in the mid–1970s, when oil-rich countries imported labor to build roads, hotels, homes, industrial complexes, and the like. By 1986, labor had become the Philippines' number one earner of foreign exchange, as overseas workers sent back remittances of over one billion dollars a year. The Filipinos who work abroad, then, are not only easing the domestic unemployment situation somewhat; they are also a key source of the foreign exchange the government desperately needs to repay its onerous $28 billion foreign debt. So vital

are they to the economy that President Aquino herself lauded overseas workers as the "new heroes of the Republic."[24]

Overseas work may bring a temporary increase in income that buys a color television and perhaps even schooling for one's kids, but the Philippines' "new heroes" have their own sets of problems, their own *malas*. We hear stories of horror at the hands of employers overseas: young women who travel to Japan thinking they will be entertainers only to find themselves prostitutes and virtual prisoners, a maid in Kuwait who died after having been beaten by her employer, men and women returning psychologically scarred. We meet pained husbands who, having spent years overseas, return to discover that they and their almost-grown children are near-strangers. We meet Filipinos whose spouses went overseas so long ago to provide for their families that their marriages are by now, for all intents and purposes, over.

In Bataan, we become friends with a young father of two who has recently returned from working six years in the Middle East. He is fairly typical of the Philippines overseas workers: the majority perform manual labor in the Middle East, and 75 percent are twenty-five to forty-four years old.[25] And, like other skilled construction workers in the Middle East, he earned more than $500 per month, whereas in the Philippines he would probably have earned the peso-equivalent of around $75.[26] Our friend and his wife are from families of modest means, but his new concrete, three-bedroom home tells of his recent *suerte*. Inside are a color television, a tiled bathroom with indoor plumbing, and a kitchen with an electric range and other modern appliances—all *katas ng Saudi*, fruit of Saudi Arabian employment.

Though his children had more toys than most of their playmates and more financial security, they were lacking a father. So, when his Saudi Arabian contract expired, he returned home, willing to sacrifice a decent salary for a poorer-paying job that would allow him to be with his wife and children. The problem, he confides to us with great frustration, is that he has not found a job at all. His savings dwindling, he finds himself sadly contemplating a return to the Middle East to support his family.

He sends us to visit his older sister. She and her husband run a small eatery in a nearby town. Displaying typical Filipino hospital-

ity, they welcome us like family, feed us their local delicacies (vehemently refusing payment), and insist we spend the night. Late in the evening, the wife takes out a photo album and tells us her story. Her father was killed when she was twelve, and she had to stop her schooling to become a "helper," a maid, for a local Bataan family. The one dollar per month that she earned she promptly brought to her mother. Years later, she married and had two daughters, one of whom was bedridden. She and her husband worked hard to make ends meet, but they could not. After a number of jobs in the Philippines, the couple decided that there was no other option: one of them had to seek work overseas. For two years, the wife worked as a maid for a Brazilian diplomat living in Australia. Her employee was good to her, but the years were not. Her sickly daughter died while she was away; she returned home for the funeral. In a corner of the bedroom are all she has to show for those two years: a pair of winter boots and a large blonde doll.

You cannot travel anywhere in the Philippines without hearing tales of life as an overseas contract worker. The brother-in-law of a friend shares his. He is an assistant principal at a public high school in Manila, but, in the late 1980s, he makes the peso-equivalent of only $5.75 a day. That is hardly enough to support his family. (It has been estimated that the peso-equivalent of between $6 and $9 was needed to keep a family of six above the poverty line in the late 1980s.)[27] Because of this situation, some years ago he went to the Middle East to work for two lonely years. On his return, he used his savings to buy a "jeepney," one of the colorfully painted, elongated descendants of a World War II jeep that ply Manila's streets as public mini-buses into which can be squeezed 16–20 riders. Now, he comes home for dinner after a full day of work at the high school, then goes out and drives his jeepney route twice, netting enough to more than double his salary each month.

If temporary contract work in the Middle East is a much-sought-after commodity, work in the United States is coveted even more; it is perceived as the ideal place to live. Filipinos often tell us that if they could just get to the United States, their problems would be solved. Secretaries, barbers, children of our friends, even one of the mayors we interview: all want us to bring them back with us to "the States," and, if not, to help them get visas to travel there alone. "Everyone is rich in Utah, aren't they?" a clerical worker asks as if confident of an affirmative response, adding that she recently became a Mormon and is hopeful that she will be able to emigrate to Utah soon—and therefore become rich herself. On occasion, when we ask a child what he or she wants to be when grown, we get the answer "American." (When asked in a 1982 survey what nationality they would want to be, only 10 out of 207 Filipino elementary students chose Filipino.)[28] "At a young age, my ambition was to be an American," a Filipino movie director, who has garnered worldwide acclaim for his nationalist movies, admitted to historian Stanley Karnow.[29]

In our conversations with Filipinos about their dreams and hopes and their children's prospects, they often raise on their own the topic that we have come to study: the future of the country's natural resources.

"What will your children be when they grow up?" we ask a poor fisherman in Bataan. He sighs. "My father was a fisherman and so I too am a fisherman. I was born a fisherman. But the fish are dying. So there will be no fish for my son to catch. He will not even be able to be a fisherman like I am." Elsewhere in the Philippines, we talk with a peasant woman whose family grows rice on a small plot of land. She gives us a strikingly similar answer: "The forests are disappearing, and so the soil of our rice field is being washed to the sea. There will be no soil left by the time our children are grown. What, I wonder, will become of them? How will they grow rice?"

We are reminded of these statements some months later in Manila as we sit in the plush, wood-paneled waiting room of the country's Secretary of the Department of Environment and Natural Resources. A large painting that hangs over the sofa dominates the room. The picture depicts a barren, clear-cut hillside, littered with brown tree stumps. Nothing lives in the painting; it is a scene of total plunder and of no hope.

One of the questions we raise in subsequent chapters concerns the extent to which this painting and these prognoses about fish, soil, and other natural resources reflect the situation across the country. How fast are the natural resources being depleted, and what impact does this have on the people? How much of the destruction is caused by the poorer victims (and their rapid population growth) and how much by the privileged few?

Is there really no hope?

In many of the places where we are guided through plundered landscapes—scenes reminiscent of the barren painting—we see people acting together to counter the destruction and to build a better life for their children. In the provinces we visit, we discover that, as options have narrowed for the next generation and as resources have been depleted, very ordinary Filipinos have begun to fight back. Indeed, the intensity of their actions seems related to the extent of the destruction. They have blockaded logging roads to halt commercial loggers. They have replanted trees. They have fought the destruction of coastal mangrove forests. They have taken over vacant lands on which they have cultivated traditional varieties of rice using little or no chemical fertilizer and pesticide.

Consciously or unconsciously, they have become environmentalists.

And if we are to grasp why, underneath the plunder and the despair, there is hope for the children of the Philippines, we have to listen to what gives their parents inspiration and motivation. We have to try to understand their brand of environmentalism.

In the remote community of San Fernando in the southern province of Bukidnon, a young peasant woman explains how and why she and other rice and corn farmers who live near rapidly balding mountains became activists against the government's logging policies. She has never heard of global warming, but she knows well why her life and that of her children depend on these trees: "Without trees, there is no food, and without food, no life," she tells us in the local dialect. To motivate others, she and some of her fellow residents of San Fernando wrote a letter about their battle to save the forests and had the letter put away with instructions that it be reread in fifteen years. It was a time capsule of sorts—but one to spur them to action. When the letter is read again, the young woman explained to others, your children will ask you: What did you do when the forests were being destroyed? Did you fight for my future or were you silent?

This anecdote is but one of many that suggest that the central development issues that will determine the future of the Philippines' children are also in large part environmental issues. By the same token, we run into few purely environmental issues; most environmental problems demand broad developmental responses.

This book is about environment and development and people like the woman in San Fernando, people who form the backbone of the new citizens' movement for environmentally sustainable development in a country where that movement is particularly dynamic and promising. Through citizens' organizations, they are asking questions, making connections, and initiating actions—in brief, making their own history.

In this book, we offer their stories and some of their insights, much as they were offered to us throughout our travels. We attempt to piece together the various strands of the new environmentalism and to answer the questions: How do ordinary Filipinos perceive the environment and development problem? Can poor people be the catalysts of a new brand of environmentalism? What kinds of organizations have they constructed to reverse the resource plunder? What kinds of actions are they launching? Under what circumstances have citizens' groups gained ground in their attempts to replant forests and to manage natural resources sustainably? In short: Who is behind the plunder; who is organizing against it; and what are the strategies to address the problem and to launch development alternatives that can create a better future?

In the pages that follow, we move from Baguio in the north to Mindanao in the south, from Palawan in the west back to Bataan, site of the infamous battles of World War II. In each of these places we discover ingredients of a new approach to development. In each of these places we find that, out of the plunder, citizens' groups are working to rebuild their paradise. This process of rebuilding offers lessons, ideas, and hope for individuals and organizations the world over who are trying to construct a more participatory, equitable, and sustainable future.

Chapter Two

Nature's Revenge

Others get rich on nature, while we get nature's revenge.
Peasant in San Fernando, Bukidnon, Mindanao

To understand the rapid growth of Philippine grass-roots environmentalism over the last few years, we travel through the country's main ecosystems: its uplands and lowlands, its freshwater and coastal areas.

We start, as do most visitors to the Philippines, in Manila, an urban ecosystem which today ranks among the most polluted on earth, and among the most congested as well. Inhabited by some eight to ten million Filipinos, Manila is bursting at its seams with people who struggle daily with an urban infrastructure in decay.

That mix of congestion and pollution makes itself felt constantly. Several times a week, for instance, we travel by public transport through Quiapo, Manila's traditional market center, which overflows with people and vehicles almost 24 hours a day. Most people are in Quiapo as are we—simply to pass from one part of metropolitan Manila to another. Others come as devotees of the Black Nazarene, a seventeenth-century life-size figurine housed in Quiapo's old Catholic church. Some are more interested in the small stalls outside the church doors, where women sell various medicinal herbs and amulets that are reputed to enhance sex drive or induce menstruation, as the need may be. Still others head for the plaza next to the church, where for decades rallies of every conceivable political hue have been held.

None of the transients in Quiapo except us seems at all interested in a structure at the side of the plaza, just across from the church and the vendors. The structure resembles a baseball scoreboard, but words on it proclaim it to be an "Air Quality Meter" and a "Project of the National Pollution Control Commission." The board, once green, is now black with soot. No lights flash to indicate whether the air has reached unsafe levels; no numbers appear.

An official in the Department of Environment and Natural Resources subsequently tells us that the meter has not worked for years and, indeed, that Manila's air quality has not been measured since 1983.

These days, the best gauge of air quality is the number of people who hold a handkerchief over nose and mouth as they pass through places like Quiapo, in a crude and inadequate attempt to filter out the pollution. These makeshift masks alone are enough to dispute the contention advanced by some Westerners that only rich people in rich countries care about air quality.[1]

Faces half-hidden by these handkerchiefs, millions of commuters queue up along Manila's streets in Quiapo and elsewhere during morning and evening rush hours. The throngs fill the sidewalks and spill out far into the streets, like spectators expecting Macy's Thanksgiving Day parade. But, in reality, they are anxiously awaiting a ride—and that is not easy to get in Manila. Even with thousands of buses, tens of thousands of jeepneys, one aboveground metro-rail system, numerous taxis, and an ever-increasing number of private cars, the available transport is not enough for the city's burgeoning population. As a result, rush hour has expanded to three hours in the morning and another three at night. A government "spot survey" reported that the average wait for a ride during peak hours doubled over the 1980s, reaching a full hour. In certain parts of the city we find ourselves stranded even longer, frantically trying to squeeze into anything on wheels that passes. Considering our frustration and anxiety on those occasions, it does not totally surprise us to read newspaper accounts of murders that occur in the frenzy of rush hours as people fight for a seat.[2]

Waiting, with or without handkerchief, it is impossible to filter out the big black clouds of exhaust many of the vehicles leave in their wake. "Smoke-belchers," Filipinos call them, referring rather unscientifically to any vehicle whose exhaust chokes bystanders. The government's Department of Environment and Natural Resources (DENR) reports that more than 50 percent of Manila's vehicles are "smoke-belchers," by which they mean vehicles violating emission standards on air pollution.

These statistics help to explain why asthma and other respiratory diseases run rampant in Manila, as do several varieties of eye ailments. The children of Manila, and particularly those who work on

its streets, are especially vulnerable. We conduct another informal poll: more than half of our friends' children suffer from some respiratory disease. Like many Manilans, we spend much of our time in the city bathing our stinging eyes with eye-drops and battling various eye infections.

Although experts attribute 60–70 percent of Manila's air pollution to motor vehicles, other environmental nightmares compound the problem. During our initial few months in Manila, the city's main garbage dump ("Smokey Mountain") is closed: it simply cannot accommodate any more garbage, we are told. Informal garbage heaps appear on nearly every street. Some households become exasperated and torch the fetid fly-ridden piles, sending nauseating fumes of burning plastic into the air. Other households simply let the heaps build up. As a result, typhoid and other water- and food-borne diseases are said to be on the rise. The rainy season exacerbates the problem. During typhoons, silt from denuded hills combines with the ubiquitous rancid garbage to jam sewers, on one occasion leaving a section of Metro-Manila up to ten feet below flooding waters.

In Manila, as we discover, action to combat this pollution is stymied neither by a lack of public concern nor by an absence of laws. Both exist in abundance. Consider the transport sector again. For over a decade now, it has been unlawful for any owner or operator to allow a motor vehicle to discharge above a set level of air pollutants. Consumer groups spring up regularly to fight the pollution of Manila's air; they sport such colorful acronyms as GASP (Groups Against Smoke Pollution) and GAS MASC (Groups Against Smoke-Belching to Make Air Safe and Clean). And, as the president of one of the jeepney drivers' unions explains, the drivers themselves would like nothing more than to have nonpolluting vehicles: "We know that smoke-belching is bad. After all, we're the ones hurt most by it. You travel to and from work in the pollution. But we're the ones who have to suffer in it for fourteen hours a day."

Old diesel engines, many imported secondhand from countries like Japan, are part of the problem. Pollution is further aggravated by cheap, low-grade petroleum that produces high levels of sulfur dioxide (which can cause bronchitis and irritation of mucus membranes) and contains dangerous amounts of lead (particularly harmful to children). Philippine gasoline brands, as a top DENR official

readily admits, are among the "dirtiest in the world." But, he explains, this is all a poor country like the Philippines can afford.

To shift to low-sulphur and unleaded fuel would, first of all, mean redesigning Philippine refineries, which would, in turn, increase fuel prices. It would also require new engines. And how the public transport sector could cope is hard to imagine. Most jeepneys, for instance, are owned by individuals or small entrepreneurs whose earnings are insufficient to purchase newer, cleaner engines. To yank offending vehicles off the road would be to strand even more commuters. And even were enforcement of air quality standards desirable, the government frankly acknowledges that it lacks the funds to do a decent job.

Outlaw jeepneys? Get foreign funds for new buses and metro-rails to crisscross the metropolitan area cleanly? More complications here—for, pollution-ridden as the current transportation system is, it is probably the largest employer in a city where unemployment is a serious problem. Beyond the 100,000 or so jeepney drivers, hundreds of thousands more earn their livelihood from this form of transport. Aside from the dependence of the street children on this traffic, thousands service the jeepneys, sell spare parts, repair tires, paint the jeepneys, or sell colorful jeepney decals proclaiming everything from a pious "God, protect this trip" to a racy "Driver by day; screw-driver by night."

No easy answers, we begin to discover. As long as the Philippines and the majority of Filipinos are locked into a grinding cycle of poverty and inequality, pollution in the cities will flourish. And most of the Filipinos who live in Manila will find life difficult to bear.

But anyone who listens to the various dialects being spoken on Manila's street corners comes to realize that many of the city's inhabitants are not native Manileños. They, like the majority of Filipinos, began their lives in the outlying provinces, where most live at or below subsistence level. In the provinces, most people depend for their livelihoods directly on the country's forests, fishing grounds, minerals, and once-fertile lands. The degradation of these natural resources is leaving growing numbers of Filipinos even poorer—and with little choice but to migrate to Manila and add to its burgeoning population.

To witness this "push factor" for ourselves, we leave Manila's pollution and crowds behind and travel into the countryside. There

we see that Manila's pollution represents but a small part of the Philippine environmental crisis. And there we begin to catch glimpses of a fundamental difference between the environmental problems in Manila and those in the countryside, a difference that parallels one between Third and First World countries overall. As we venture outside Manila, we discover that most environmental problems involve the depletion and degradation of natural resources at the *start* of the production chain. Forests and fishing grounds, for most rural Filipinos, are sources of livelihood, not places of recreation or spots for an idyllic vacation. Countries like the Philippines are generally primary producers, with large subsistence sectors totally dependent on natural resources. To live, people eat and sell the fish they catch or the crops they grow—and typically these people exist at the margin. For them, the ecological crisis involves the fate of resources at the start of the development pipeline. Natural-resource degradation becomes an immediate, and life- and livelihood-threatening, crisis.

This concern is quite different from the air and water pollution and waste-disposal problems that most city-dwellers and most Western environmentalists think of as the ecological challenge. These problems occur at the *end* of the production chain, at the end of the development pipeline. They have to do with the disposal and assimilation of what is left over—the waste—after something is produced. They are the bulk of the environmental crisis in richer countries but make up a minority of the environmental problems in a country like the Philippines. It is a simple point, yet crucial for understanding where the Philippine ecological crisis and its environmental movement are, and where they are not. Celso Roque, then president of the Philippine environmental group Haribon, captured some of this difference in 1986:

> Western environmentalism as an ideology and as technology must be adapted and revised to suit the unique Philippine conditions. Our social and ecological landscape is almost in direct contrast with that of the west. It is tropical rather than temperate. The economy is agricultural rather than industrial. There is general poverty rather than affluence. The population is rapidly growing rather than stable. The system of access to natural resources is feudal rather than democratic.[3]

These differences are dramatized as we journey by bus to places such as the province of Benguet, a half-dozen hours and a world away from the urban pollution and congestion of Manila. There, we travel in a rented jeepney from Baguio City to the municipality of Itogon. The climb over narrow mountain roads strewn with rocks is slow, bumpy, and perilous. But the spectacular view from a small barrio at the top makes the trip seem worthwhile. Across a deep valley rise other towering peaks of the Cordillera Mountain Range of northern Luzon, where indigenous Igorot ("people of the mountains") have lived for centuries. Hours by bus north of here are the awe-inspiring rice terraces, some built by Igorot ancestors two thousand years ago—rice terraces so impressively and intricately sculpted on the mountainsides that they have been called the eighth wonder of the world. There, Igorot women and men practice organic rice production using typhoon-resistant native varieties that provide stable yields.

But the Cordillera is also gold country, and Benguet province offers a window into the dynamics of the mining sector. As we clamber out of the jeepney and the driver turns off the engine, we are greeted by a persistent droning of heavy machinery far below. The sound directs our gaze down into the heart of the valley. There, on the facing mountainside, dozens of bulldozers, cranes, and trucks weave their way up deep man-made gashes. We are looking at an enormous open-pit mine. A large slice of the mountain has already been carved away by these earth-eating machines. Without its tree-cover, the exposed slope of the mountain facing us looks unstable: nothing holds it together any longer. The view brings to mind the glass side of one of those ant-farms that fascinate children, but here heavy machinery replaces the ants. And, as we remind ourselves with a shock, the ant-farm's sand is in this case the inside of a mountain, its topsoil and trees stripped and its rock blasted and leveled.

"This is the Grand Antamok open-pit mine," says one of the Igorot residents of Itogon, whose stories we have traveled up into these Cordillera Mountains to hear.[4]

Our Igorot guides help us decipher what we are seeing. At the foot of the mine stand long rows of bunkhouses where, we are told, hundreds of miners (many of them also Igorot) sleep, despite the constant noise and dust of the twenty-four-hour mining operation. Just below the barracks, at the lowest point of the valley, a wide brown riverbed winds its way out of sight. It has been a long, hot summer and the rainy season is late in arriving, which explains why there is no water in the riverbed. But, near the mine site, enor-

mous piles of rocky waste from the open pit ("muck-waste," the locals call it) have been bulldozed into the riverbed, a convenient and cheap waste-disposal method.

Our Igorot hosts are, they inform us, also gold-miners. They call themselves "pocket-miners." As several tell us with pride, they descend from many generations of Igorot pocket-miners who, long before the days of mining companies, found themselves sitting on some of the Philippines' richest gold veins. Indeed, seventeenth-century Spanish conquistadores, whose interest in the Philippines derived at least partially from its minerals, made note of the small-scale mining in the Cordilleras.[5]

The technology of small-scale mining has not changed much since then. "We mine as did our grandfathers before us," explains one of the pocket-miners, directing our attention away from the huge open pit to several small holes in an adjacent slope. From this far away, the holes look like small round caves. These are the "pockets," where teams of five or six people have tediously hammered and chiseled their way up to 50 meters inside the mountain. "We are not engineers. But we can spit into a stone and tell where there's gold," an old man tells us with pride. "No one in the company can do that."

After the pocket-miners manually chisel away enough stone, they carry it in sacks to a small nearby mill. Like the pocket-mining itself, the milling operation is low on technology and high on sweat. Again like the pocket-mining, the mill's technology has changed little, we are told, from the time of the miners' grandparents. At the mill site, women and children hammer the gold-bearing rocks into nuggets the size of corn kernels. The nuggets are then crushed even finer in the mill's big metal container (run by a small motor). Finally, the crushed rock is flushed with water and sluiced and panned to remove the minuscule grains of gold.

Most are second- to fifth-generation pocket-miners and, over the years, have been able to feed families, build simple but sturdy homes, and even send their children to school. "We are not educated; small-scale mining is the only viable job for us," one miner explains. Another echoes him: "We chose this work because, even though we do not have an education, it is possible to live well."

Or, at least, it *was* possible.

One of our Igorot hosts points to the left, to a nearby ridge. A

slice of mountain has been torn away, an enormous bite taken out of one side of the peak. It is another of the Benguet Corporation's open-pit mines in the Grand Antamok Project region, this one in an area referred to as Keystone West. Our hosts have brought us up to this mountain peak to see these two scars in the Cordilleras, these two parts of the Grand Antamok Project. For the open pits have changed these people's lives dramatically.

The people of Itogon trace their troubles back to the early 1980s, when Benguet Corporation, whose vast gold-mining concession from the Philippine government now covers subsoil rights to most of what we see, began bulldozing open-pit mines in this area without consulting the Itogon community. Soon thereafter the residents of Keystone started to notice some disturbing changes.

One woman, a former schoolteacher and wife of a pocket-miner, points to her three small children. They are on the ground playing a game with two toys of the sort that entertain children in poor families everywhere in the Philippines—in this case, a small, nondescript stone and a somewhat rusty San Miguel beer-bottle cap. "The children are dirty," she says quietly. "They can't take baths here because there's no water. And they all have skin rashes. There used to be a spring nearby—just there." She indicates an area below the sliced-off ridge of Keystone West. But as the land was leveled, she continues, and "the open-pit mining began, it disrupted the water flow, and the spring just disappeared. We now have to go to the other side of the mountain to get water." As a result, there is not enough water either for bathing or for drinking.

As we are told time and time again by people with similar stories, on this mountain and elsewhere, water means life. Migration flows, settlements, and people's lives are built around water. As the water dries up, so do the people's possibilities. "We used to plant rice and bananas right over there," another woman tells us. "But now we can't because there is no water."

Water is a major problem. But the open-pit mine has brought other ecological problems to the long-time residents of this area. There is also the pollution—including the constant noise pollution of Benguet's machinery. And there is the omnipresent thick dust that covers everything during the long dry season.

As if those were not problems enough, instead of using water as the Igorot in this area do, Benguet uses toxic chemicals to separate

the gold from the rest of the rock. (In certain other parts of the Philippines and elsewhere in the Third World, some small-scale miners also use chemicals such as mercury in the processing of the minerals.) Then, one pocket-miner explains, Benguet simply flushes those toxics down the river with the left-over mine tailings. "We used to have a lot of cows here—almost fifty. But they drank the water with the tailings and died." Benguet, he says, refused pleas for compensation.

As Benguet intensified its open-pit operations, other problems arose for the Igorot pocket-miners. Would the pocket-miners simply move out as Benguet decided to expand its operations into the area of the pocket-mines? Where would they go? Whose land was this? Whose tunnels? Whose gold? We hear the common refrain: "This area is owned by the whole community. If we lose our water, if we lose our source of livelihood, how can we live? What will happen to our children?" As many as 20,000 people may be affected as small-scale miners in the area lose their work.[6]

In early 1990, the problems came to a head; the pocket-miners decided to act. One day, they tell us, to stop Benguet from mining their lands they set up a small barricade on the lone road heading up the lucrative Keystone Vein. The blockade, coordinated with similar actions by pocket-miners in two other nearby veins of Benguet's open-pit expansion, succeeded in closing the Grand Antamok Project sites for three full months. After three months the government intervened, and Benguet signed an agreement with leaders from the two other sites. The agreement committed the company to a number of environmental actions, including improvement of water supplies and a halt on dumping their toxic and other wastes into the river. But, after their previous experiences with Benguet Corporation, the Keystone blockaders doubted Benguet's sincerity. More than one year later, at the time of our visit, the promises remain unfulfilled and the blockade by the Keystone pocket-miners continues.

We walk back to the two-story wooden house of one of the pocket-miners and sit in the shade of a large mango tree. An older man speaks up: "The company is powerful with the government. But we're also people even though we're poor. They can pay big taxes to the government. But what happens to our world here? It becomes dust. It's in our blood as Igorot not to want to see our brothers in hardship. But that's what we're seeing now."

Cynicism about Benguet Corporation runs deep, and the doubts extend to the Philippine government, which controls mining licenses and actually owns about a third of the shares of Benguet Corporation. The cynicism partially explains the residents' reluctance to believe in paper promises. The pocket-miners show us recent photos they have taken of Benguet dumping tailings in the river, in clear violation of the 1990 agreement. They have brought the photos to the attention of the relevant government officials but, they emphasize with frustration in their voices, the government has not acted.

In the nearby city of Baguio, researchers from the Cordillera Resource Center for Indigenous Peoples' Rights tell us more about the Benguet Corporation and provide us with voluminous background materials. Started by U.S. investors in 1903, later sold to one of the wealthiest Philippine families, and now owned in approximately equal thirds by wealthy Filipinos, the Philippine government, and U.S. investors, the company spearheaded the Philippines' ascendance to become the world's ninth largest gold producer, and it turned gold and copper concentrates into two of the country's leading exports.

For eight decades the company operated underground mines to extract the area's high-grade gold deposits. The spread of the underground mines, which used the abundant pine trees of the Cordilleras as internal buttresses, contributed significantly to the deforestation. Benguet did well over the years, becoming one of the Philippines' top twenty corporations, its largest primary-gold producer, and the seventh largest gold producer in the world.[7]

But the very success of the underground mines, the very efficiency of the plunder, limited the life of the operations. By the 1980s, Benguet found itself confronting a consequence of its large-scale mining of a nonrenewable resource: profits began to fall as the underground mines exhausted the richer veins. In addition, labor costs rose as miners increasingly unionized.

Open-pit mining offered a lucrative way to use less labor while pursuing "optimization in the exploration of available mineral resources," as Benguet Corporation phrased it. Indeed, Benguet's

gold subsidiary forecasts more than doubling its revenues from 1989 levels within a few years in its Grand Antamok Project as mines are shifted to open-pit operations. Using Benguet's own projections of potential gold reserves, the Cordillera Resource Center has calculated that the Grand Antamok Project will yield the corporation more than $400 million in revenues over a thirteen-year period. Given such high dollar earnings, the Keystone residents tell us, they doubt a Philippine government so heavily indebted to foreign banks will clamp down—even if after that thirteen-year period the gold, and the entire mountain, will be gone.[8]

There are still other facets of the story of the Benguet mines. As a basic law of ecology has it, everything is connected to everything else. The effects of open-pit mining are not confined to the Cordillera Mountains, for the river basin in which we saw the waste from the Grand Antamok Project winds down through the central Luzon rice-bowl to the vast Lingayen Gulf from which, some half a century ago, the Japanese dramatically invaded the Philippines in the wake of Pearl Harbor.

A local environmental group in 1989 "followed the tailings" to learn of the devastation wrought by these gold and copper mine tailings, which often contain traces of the mercury or cyanide used by Benguet and the area's other big mining companies in processing the minerals. Rice farmers in the two provinces served by the rivers from the Cordilleras complain that, as the quantity of the tailings in their irrigated fields has risen, rice yields have plummeted. Mining wastes and tailings damage lowland irrigation canals too. And fishers in the Lingayen Gulf report a substantial reduction in catch as siltation from the tailings smothers coral reefs. Nationwide, according to the Center for Environmental Concerns in Manila, around 160,000 tons of such chemical-laced tailings find their way into Philippine rivers and lakes every day. These tailings are partly to blame for the fact that about a third of the country's largest 132 rivers are biologically dead, and most of the rest are badly polluted.[9]

To cull the basics of the mining story: For centuries, indigenous miners worked many rich mineral veins in small-scale operations that offered a livelihood and did not threaten the area's ecology. Over this last century, a few giant mining firms—many with significant foreign ownership—received government concessions and began large-scale operations with much of the output destined for export. The two communities of miners, large-scale and small-scale, coexisted relatively peacefully until the large-scale companies began to encroach on the areas of the indigenous miners and the adverse ecological impact of large-scale mining spread. Today Itogon is experiencing crisis and confrontation: a growing movement is challenging the right of the few to mine in a fashion so detrimental to the many. And although a Benguet vice-president assures us that "we are concerned with sustainable development; this is the [Benguet] corporate philosophy," what others see is plunder.

We recount the story of the Itogon pocket-miners in some detail as an introduction to the Philippines' environmental problems and its environmentalists. We do so in part to provide a contrast to Manila's end-of-the-pipeline urban pollution. And we do so also because it bears similarities to stories we hear that involve ecosystems in other parts of the Philippine archipelago.

As recently as World War II, the more than 7,000 Philippine islands were lavishly endowed with rainforests, fish, fertile lowlands, and extensive mineral deposits. Since then, by some estimates, the plunder of these resources has been taking place at a rate that is among the fastest in the world.[10] Fragile ecosystems have been pushed to their limit. As we discover firsthand, there are few places you can go in the Philippines without meeting some sort of ecological disaster. Some of these encounters begin to help us understand the forces behind the destruction as well as those fighting it.

Farmers hike with us up bare mountaintops they recall as covered with dense forests only half a generation ago. And they show us their fields, where we can actually see the path taken by their precious topsoil as recent heavy floods from the clear-cut hills above carried it off and deposited it in riverbeds below. Fishers paddle us to coral reefs, once deserving of their Tagalog name *bahay ng isda* ("fish homes"), now white and dying, no longer inhabited by an abundance of fish. As the trees and reefs fall, our guides explain, so do their harvests, be they of fish, corn, or rice.

In short, nature is taking its revenge.

At times we can judge the extent of the plunder for ourselves. The plight of the forests, for example, is clear.

We travel to what was considered the Philippines' last frontier in the early post–World War II period, to Mindanao, the southernmost island. In order to discover what has become of Mindanao's forests, we retrace a journey Robin took fifteen years ago when she first lived in Mindanao: beginning in the north, we ride a series of rickety old buses and jeepneys into the central province of Bukidnon and then on toward the southern port city of Davao.

The views from these mountain roads offer ample testimony to the efficiency of the late-twentieth-century technology of large-scale commercial logging, even in a poor country. Some fifteen years ago, when there was little more than a steep, rock-strewn dirt path across these mountains, this part of central Mindanao was passable only with a four-wheel-drive vehicle. The forests were thick, and the people few. Now, thanks to the greed of the big commercial logging companies and the need of the small agriculturalists (who move into the forests only after the loggers have built roads and chopped down the biggest trees), the mountains are almost bare. Hardly a tree is in sight; in many places, the only trees left standing are those that do not float and therefore cannot be transported down rivers to the sawmills closer to Mindanao's ports. The deforestation is a crime that has already contributed to a series of droughts which some of Bukidnon's inhabitants fear will turn one of the most fertile areas in Asia into a desert.

Bukidnon is a microcosm of processes at work in the country as a whole. When Ferdinand Magellan claimed the Philippine Islands for Spain in 1521, the archipelago was perhaps 90 percent forested. One hundred years ago, when the United States barged in on the tail end of the Philippines' near-completed revolution for independence from Spain and claimed the islands as a U.S. colony, some 70 percent was blanketed with trees. By the time of independence after World War II, forest cover was down to somewhere around 60 percent—and had decreased to around 35 percent by the time Ferdinand Marcos won his second presidential election in 1969. Today only about 20 percent of the country is still forested, less than half of the 54 percent forest cover that the Department of Environment and Natural Resources says the country needs to maintain a stable ecosystem.[11]

Of the 6–7 million or so hectares of forest that remain, only about 600,000 are primary (virgin) rainforest. Some 120,000 to 200,000 hectares of the remaining forest are disappearing each year. To transfer these numbers to a different context: A country whose total land-mass is only the size of Nevada is *every year* losing forest on an area equal to three-quarters of Rhode Island.

Today over 18 million Filipinos who live in the overlogged uplands are directly affected by this loss of forest cover. Among them are most of the approximately 3.5–4.5 million indigenous peoples of the Philippines, peoples like the Igorot of northern Luzon.[12] Indeed, the majority of the remaining forests are located on lands these communities claim as ancestral domain.[13] Through the centuries, lowlander migrants—first, commercial loggers and big corporations, and then, in their wake, subsistence farmers—pushed many of the indigenous occupants onto more and more marginal lands in more and more fragile ecosystems. But it is these indigenous Filipinos who have traditionally lived sustainably in the forest.

Today, many of them are struggling for survival, demanding recognition of their ancestral-domain rights, which includes rights to lands lost. Throughout the Philippines, where indigenous people still live on ancestral land, they are trying to protect the last remaining rainforests from the plunder that has followed the invasion of the lowlanders.

One of the most dramatic instances of such resistance to the destruction of age-old forests is unfolding about 100 kilometers south of the bald Bukidnon mountains, at the foot of the Philippines' highest peak. This is Mount Apo, a dormant volcano and site of the last major forest cover in southcentral Mindanao. Mount Apo's forested slopes and foothills are home to the Bagobo, one of Mindanao's many indigenous groups who are collectively known as the Lumad ("born of the soil").[14] Mount Apo is the Bagobo ancestral land, their place of worship; it is where their supreme god and common ancestor, Apo Sandawa, lives. In brief, the mountain is sacred. And over the centuries, they explain, Apo Sandawa has been good to them: the mountain has been a source of water, food, and shelter.

In 1936 the Philippine government declared Mount Apo a national park, and decades later the Association of Southeast Asian Nations classified it as one of the region's "heritage sites"—which together should certainly have been enough to guarantee that Apo Sandawa would not be disturbed. To the contrary, however, in 1985 the government-owned Philippine National Oil Company (PNOC)

began exploratory drilling at the base of Mount Apo to test the potential for geothermal energy development. The government's own DENR raised concerns, denying the project a permit for exploration in 1988. But PNOC decided to ignore such interference. By 1989, two test wells (each more than 2,000 meters deep and 20 centimeters in diameter) and a 8.5-kilometer road had been built; Mount Apo's Blue Lake, where Bagobo went to worship, had turned brown and muddy; trees in the area were said to be dying; erosion near the road was reported; and PNOC made clear its intention to build new roads and expand the number of geothermal wells to as many as thirty-five or forty.

At that point, the resistance of the Bagobo and other Lumad—and the confrontation—escalated. Two thousand Lumad from nine tribes met and signed a *d'yandi*, an intertribal blood compact to defend their area from the project. It was an historic occasion: only the third Lumad *d'yandi* since the thirteenth century, and the first time in history for all nine tribes here to gather as one. Their solemn words made the event all the more momentous: "For us . . . the land is our life; a loving gift of [The Creator] to our race. We will die to defend it, even to the last drop of blood."[15] One year later, as PNOC persisted, the Lumad leaders issued an even stronger pledge as part of a ceremony during which three trees were planted: "We are ready to take up arms, if necessary, to defend . . . our rights to survive as a people of the mother earth."[16] In an attempt to explain the resistance to others in this predominantly Catholic country, one of the elders asks rhetorically, "How would the people of Manila like it if someone dug giant holes in your Manila Cathedral?"

For their concern for the fate of their forests, many Lumad leaders are being termed Communists, detained by paramilitary forces, and harassed, and their ancestral domains are being bombed by the government military. The geothermal project continues, as does the Bagobo's life-and-death struggle to protect their ancestral domain.

For the Lumad, the Mount Apo geothermal project is not simply an environmental issue; it is inextricably linked to larger questions of development. As one elder expounds: "We do not oppose development . . . we are for it: for the improvement of humanity, not the opposite."[17] Or, as a young Lumad leader, Edtami Mansayagan, queries: "For whose development is this?"[18]

We learn in Manila that Mount Apo is also one of the last remaining habitats of the endangered Philippine monkey-eating eagle (*Pithecaphaga jefferyi*)—undoubtedly the most famous of Philippine animals, thanks to the interest Charles Lindbergh took in saving it from extinction. Today perhaps three hundred of these eagles are left in the wild. The Philippine eagle, like Mount Apo's flying lemur and the Philippine tarsier, represent the country's abundance of plant and animal species (its "biodiversity") and should be tallied as part of its natural wealth. Instead, however, the eagle, the lemur, the tarsier, and others are likely to be among the silent victims of the country's forest destruction on Mount Apo and elsewhere.

No one knows just how many such species were or are found in the Philippine forests. It is known that island nations tend to have greater numbers of unique species. In the Philippines, one survey of just over a hectare of forest reserve uncovered more than one hundred species of trees. On one mountain alone, Mount Makiling, more woody plant species exist than in the entire continental United States. Yet, considering the extent of the country's forest destruction, some experts have concluded that half of the species unique to the Philippines—its endemic life forms—have already been lost. The Philippines, concludes a report prepared for the U.S. government Agency for International Development, represents "the single worst case scenario . . . of loss of biological diversity in tropical Southeast Asia."[19]

In travels to other parts of Mindanao, we follow the destructive path of deforestation into the arable lowlands. For generations, the mainstay of the Philippine diet has been rice and, in some areas, corn. In recent years, we are told, yields have been declining in fields beneath overlogged hills. Without the tree cover, rain and mud rush unimpeded down the slopes, leading to flooding and erosion. Overall, throughout the Philippines, around a billion cubic meters of agricultural topsoil (the equivalent of 100,000 hectares of land one meter deep) are lost to erosion each year.[20] Deforestation deserves a good deal of the blame for wiping out in a century natu-

ral resources that had been created over thousands upon thousands of years.

The loss of topsoil is compounded by unrestrained use of agricultural chemicals. Decades ago, Mindanao's fertile lowlands attracted such large agribusiness firms as Del Monte and Dole, and they have made huge profits off pineapple and banana plantations there. Today, these companies control fully half of Mindanao's arable land. South of Mount Apo, we descend from the hills into vast tropical-fruit plantations. At some of these, workers without gloves or masks use dangerous—and, in at least one instance, banned—pesticides and other chemicals. They complain to us of skin rashes, respiratory diseases, pregnancy complications, sterility, and even death.[21]

The land, too, is suffering from the corporations' abuse. At a large Dole pineapple plantation on the southern coast, we view the complete denudation of miles and miles of land between the mountains and the sea. "The plantation looks quite modern and efficient," a worker confides. "But there are real problems when it rains. The original creeks were bulldozed by the company to flatten the area and diverted into big creeks and then into rivers. So when you have heavy rains, it is really flooded." Now, when it rains, the rivers simply rush with enormous force into the sea, bringing substantial amounts of eroded soil with them.

If we start to grasp the extent of the destruction of the Philippine ecosystems as we travel through Mindanao, we begin to appreciate what it feels like to be among its victims only when we journey to a small fishing community in Mindoro, the island just southwest of Luzon. We visit, in part, to learn about fish and coral reefs and mangrove forests. But nature has different plans for us, including a taste of the helplessness and fear that the degradation of a natural-resource base can bring to the recipients of nature's revenge.

What happens is this: As we prepare to leave Mindoro for Manila, a "signal 3" typhoon—that is, the strongest—brings torrential rains and powerful winds, marooning us for several days. Typhoons are a way of life in the Philippines; such inconveniences as being stranded for a day or two are to be expected.

What is not expected is what happens *after* the height of the typhoon passes: an angry sea begins to move inshore. As the waves grow fiercer and taller over the next two days, the sea inundates

the beach area where we are staying, uprooting trees, collapsing bamboo huts, and, with shocking ease, eating away at cement foundations of other buildings in its path until they too crumble. We look to our local host for reassurance, for a statement that we should not worry, that this happens in every big typhoon. But his eyes tell of fear and of the unknown. "This is the first time I've experienced anything like this," he says quietly, as the water and sand invade the room.

We sit with legs raised on bamboo chairs to avoid the incoming water. We watch helplessly as the waves grow bigger, and we listen to the sounds of destruction around us. There is no evacuation team to whisk us to safety, no radio broadcast to advise us what to do. The radio (once we gather enough batteries to turn it on) reports only what is happening in Manila, miles away. We discuss putting together our own evacuation plan. But the unpaved road to the nearest town now resembles a river; it is impassable. The hills behind us would offer safety from the oncoming waters but, steep and eroded as they are, they present their own set of dangers.

So we sit and wait, powerless against the sea—until finally the waves grow smaller, the ocean recedes, and the destruction stops.

Days later, safely back in Manila, we discuss our experience with marine-resource experts. "You must have experienced a 'storm surge,'" they surmise, explaining that giant waves can be generated in the wake of typhoon winds when the storm moves out into open sea. But why wouldn't the fishers along Mindoro's coast have experienced something like this before? we ask. And why would it have such force?

The answer they suggest shows us another instance of plunder: such waves used to be weakened by coral reefs that encircled islands like Mindoro. In addition to serving as breakwalls against storm surges, coral reefs are also where fish live, eat, and congregate. But in the past fifteen years, 70 percent of the Philippine reefs have been destroyed—thanks to a combination of siltation from denuded mountains, tailings from mines, and harmful fishing techniques. These last include gargantuan drift nets used by foreign fishing fleets, dynamite blasting by fishers in search of quick-and-easy catches, and cyanide squirted into the reefs to stun and catch the exotic tropical fish about half of which will end up inhabiting

aquariums in U.S. homes. Foreign demand for pieces of the coral reef takes its toll as well, and the U.S. market also accounts for more than half of these illegal exports of ornamental coral.[22]

Plunder of this magnitude—massacred reefs, eroded soil, degraded forest land—is numbing enough to be almost incomprehensible. But after seeing the destruction and strain on these ecosystems, we begin to understand the constant inflow of people from the countryside to the city. If your minerals were being depleted, your forests chopped, your soil eroded, your fish caught by others, where else would you go? The inescapable conclusion is that the pollution and the congestion of Manila will never be solved without first halting the depletion of the country's natural resources.

Yet really to understand how to reverse that degradation, we need to grapple in more depth with some key questions: Whose resources are these? Who is really responsible for the plunder? How is this destruction related to a development path that has transferred control of these resources from millions of farmers, fishers, and indigenous peoples to the government and a few large Filipino and foreign firms?

To answer these and other questions, we decide to look in more detail at the Philippines' tropical rainforests, a resource whose destruction throughout Asia, Africa, and Latin America has captured the attention of people globally as one major contributor to global warming.

Chapter Three

The Last Rainforests

Our environmental problem is not a problem of trees and of water. It's a problem of politics, of economics.

Dr. Delfin Ganapin, Jr., Assistant Secretary, Republic of the Philippines Department of Environment and Natural Resources

About 22,000 years ago, Palawan was already inhabited by man. This is proven by the discovery of fossil remains. . . . Where he came from . . . is not known. . . . [P]erhaps he was one of those born in the Garden of Eden and wandered to Palawan. Or it could have been that the Garden of Eden was right here in Palawan instead of in the valley of the Tigris-Euphrates as supposed.

Province of Palawan, National Census and Statistics Office, *Facts and Figures About Palawan*, 1985, p. 1

As recently as 1900, lush tropical rainforests carpeted most of the Philippine archipelago. At the current rate of deforestation, however, the country will enter the twenty-first century a barren landscape, with nearly all of its rainforests destroyed. No province better illustrates why the Philippine tropical rainforests are disappearing than the long, narrow island of Palawan, some 350 nautical miles southwest of Manila. There, an unfolding drama of people, power, and politics has turned Palawan into a microcosm of the rapidly vanishing tropical rainforests throughout the country and in many parts of the world.

Palawan is the Philippines' last frontier. Its relative isolation from the rest of the archipelago spared many of its resources from the systematic exploitation practiced elsewhere. As the planning and development coordinator for the province phrases it to us, "Palawan has been thrown out into the China Sea." Indeed, its closest neighbor is not even another Philippine island, but the Malaysian state of Sabah on the island of Borneo. It is said you can use a five-