

## *Introduction*

This book is about ending poverty in our time. It is not a forecast. I am not predicting what will happen, only explaining what can happen. Currently, more than eight million people around the world die each year because they are too poor to stay alive. Our generation can choose to end that extreme poverty by the year 2025.

Every morning our newspapers could report, "More than 20,000 people perished yesterday of extreme poverty." The stories would put the stark numbers in context—up to 8,000 children dead of malaria, 5,000 mothers and fathers dead of tuberculosis, 7,500 young adults dead of AIDS, and thousands more dead of diarrhea, respiratory infection, and other killer diseases that prey on bodies weakened by chronic hunger. The poor die in hospital wards that lack drugs, in villages that lack antimalarial bed nets, in houses that lack safe drinking water. They die namelessly, without public comment. Sadly, such stories rarely get written. Most people are unaware of the daily struggles for survival, and of the vast numbers of impoverished people around the world who lose that struggle.

Since September 11, 2001, the United States has launched a war on terror, but it has neglected the deeper causes of global instability. The \$450 billion that the United States will spend this year on the military will never buy peace if it continues to spend around one thirtieth of that, just \$15 billion, to address the plight of the world's poorest of the poor, whose societies are destabilized by extreme poverty and thereby become havens of unrest, violence, and even global terrorism.

That \$15 billion represents a tiny percentage of U.S. income, just 15 cents on every \$100 of U.S. gross national product, or GNP. The share of U.S. GNP devoted to helping the poor has declined for decades, and is a tiny fraction of what the United States has repeatedly promised, and failed, to give. It is also much less than the United States should give, both to solve the crisis of extreme poverty and thereby to provide for U.S. national security. This book, then, is about making the right

choices—choices that can lead to a much safer world based on a true reverence and respect for human life.

I have spent the past twenty years working with heads of state, finance and health ministers, and villagers in dozens of countries in all parts of the world. I have visited and worked in more than a hundred countries with around 90 percent of the world's population. The cumulative experience of seeing the world from many vantage points has helped me to appreciate the real circumstances on our planet—the causes of poverty, the role of rich-country policies, and the possibilities for the future. Gaining a proper perspective on these issues has been my struggle and challenge for two decades. Nothing else in my intellectual life and political engagement has been as rewarding.

I have been fortunate to have observed, and contributed to, some real successes—the end of hyperinflations, the introduction of new stable national currencies, the cancellation of unpayable debts, the conversion of moribund communist economies to dynamic market-based economies, the start-up of the Global Fund to Fight AIDS, TB, and Malaria, and modern drug treatment for impoverished HIV-infected people. I have increasingly understood the yawning gap between what the rich world claims to be doing to help the poor and what it is actually doing. I have also gradually come to understand through my scientific research and on-the-ground advisory work the awesome power in our generation's hands to end the massive suffering of the extreme poor, and thereby to make our lives safer in the process.

In the following pages, I will explain what I have witnessed and learned in societies as varied as Bolivia, Poland, Russia, China, India, and Kenya. You will see that all parts of the world have the chance to join an age of unprecedented prosperity building on global science, technology, and markets. But you will also see that certain parts of the world are caught in a downward spiral of impoverishment, hunger, and disease. It is no good to lecture the dying that they should have done better with their lot in life. Rather, it is our task to help them onto the ladder of development, at least to gain a foothold on the bottom rung, from which they can then proceed to climb on their own.

Am I an optimist? Optimism and pessimism are beside the point. The key is not to predict what will happen, but to help shape the future. This task is a collective one—for you as well as for me. Although introductory economics textbooks preach individualism and decentralized

markets, our safety and prosperity depend at least as much on collective decisions to fight disease, promote good science and widespread education, provide critical infrastructure, and act in unison to help the poorest of the poor. When the preconditions of basic infrastructure (roads, power, and ports) and human capital (health and education) are in place, markets are powerful engines of development. Without those preconditions, markets can cruelly bypass large parts of the world, leaving them impoverished and suffering without respite. Collective action, through effective government provision of health, education, infrastructure, as well as foreign assistance when needed, underpins economic success.

Eighty-five years ago the great British economist John Maynard Keynes pondered the dire circumstances of the Great Depression. From the depths of despair around him, he wrote in 1930 of the *Economic Possibilities for Our Grandchildren*. At a time of duress and suffering, he envisioned the end of poverty in Great Britain and other industrial countries in his grandchildren's day, toward the end of the twentieth century. Keynes emphasized the dramatic march of science and technology and the ability of advances in technology to underpin continued economic growth at compound interest, enough growth indeed to end the age-old "economic problem" of having enough to eat and enough income to meet other basic needs. Keynes got it just right, of course: extreme poverty no longer exists in today's rich countries, and is disappearing in most of the world's middle-income countries.

Today we can invoke the same logic to declare that extreme poverty can be ended not in the time of our grandchildren, but in *our* time. The wealth of the rich world, the power of today's vast storehouses of knowledge, and the declining fraction of the world that needs help to escape from poverty all make the end of poverty a realistic possibility by the year 2025. Keynes wondered how the society of his grandchildren would use its wealth and its unprecedented freedom from the age-old struggle for daily survival. This very question has become our own. Will we have the good judgment to use our wealth wisely, to heal a divided planet, to end the suffering of those still trapped by poverty, and to forge a common bond of humanity, security, and shared purpose across cultures and regions?

This book will not answer this question. Instead, it will help to show the way toward the path of peace and prosperity, based on a detailed un-

derstanding of how the world economy has gotten to where it is today, and how our generation could mobilize our capacities in the coming twenty years to eliminate the extreme poverty that remains. I hope that by showing the contours of that promising path, we will be more likely to choose it. For now, I am grateful for the chance to share what I have seen of the world and of the economic possibilities for our time.

*One*

# A GLOBAL FAMILY PORTRAIT

MALAWI : THE PERFECT STORM

**I**t is still midmorning in Malawi when we arrive at a small village, Nthandire, about an hour outside of Lilongwe, the capital. We have come over dirt roads, passing women and children walking barefoot with waterjugs, fuel wood, and other bundles. The midmorning temperature is sweltering. In this subsistence maize-growing region of an impoverished landlocked country in southern Africa, households eke out survival from an unforgiving terrain. This year has been a lot more difficult than usual because the rains have failed, probably the result of an El Nino cycle. Whatever the cause, the crops are withering in the fields that we pass.

If the village were filled with able-bodied men who could have built small-scale water harvesting units on rooftops and in the fields to collect what little rain had fallen in the preceding months, the situation would not be as dire as it is this morning. But as we arrive in the village, we see no able-bodied young men at all. In fact, older women and dozens of children greet us, but there is not a young man or woman of working age in sight. Where, we ask, are the workers? Out in the fields? The aid worker who has led us to the village shakes his head sadly and says no. They are nearly all dead. The village has been devastated by AIDS, which has ravaged this part of Malawi for several years now. There are

just five men between twenty and forty years of age left in the village. They are not there this morning because they are all attending the funeral of a fellow villager who died of AIDS the day before.

The presence of death in Nthandire has been overwhelming in recent years. The grandmothers whom we meet are guardians for their orphaned grandchildren. Each woman has her own story of how her sons and daughters have died, leaving her to bear the burden of raising and providing for five or ten, sometimes fifteen, orphaned grandchildren. These women have reached an age where, in more prosperous places, they would be the revered matriarchs enjoying a well-earned rest from a lifetime of toil. But there is no break now, no chance for even a moment's respite, because the grandmothers of this village, and countless others like it, know that if they let up for a moment, these young children will die.

The margin of survival is extraordinarily narrow; sometimes it closes entirely. One woman we meet in front of her mud hut has fifteen orphaned grandchildren, as shown in photograph 1. As she begins to explain her situation to us, she first points to the withered crops that have died in the fields next to her hut. Her small plot, perhaps a half hectare (a little more than an acre) in all, would be too small to feed her family even if the rains had been plentiful. The problems of small farm size and drought are compounded by yet another problem: the soil nutrients have been depleted so significantly in this part of Malawi that crop yields reach only about one ton of maize per hectare with good rains, compared with three tons per hectare that would be typical of healthy soils.

A half a ton of grain from a half-hectare field would not be sufficient for proper nutrition and would provide precious little, if any, market income. This year, because of the drought, she will get almost nothing. She reaches into her apron and pulls out a handful of semirotten, bug-infested millet, which will be the basis for the gruel she will prepare for the meal that evening. It will be the one meal the children have that day.

I ask her about the health of the children. She points to a child of about four and says that the small girl contracted malaria the week before. The woman had carried her grandchild on her back for the ten kilometers or so to the local hospital. When they got there, there was no quinine, the antimalarial medicine, available that day. With the child in high fever, the grandmother and grandchild were sent home and told to return the next day.

In a small miracle, when they returned the next day after another

ten-kilometer trek, the quinine had come in, and the child responded to treatment and survived. It was a close call, though. When malaria is untreated over the course of a day or two, a child may slip into cerebral malaria, followed by coma and then death. More than one million African children, and perhaps as many as three million, succumb to malaria each year. This horrific catastrophe occurs despite the fact that the disease is partly preventable—through the use of bed nets and other environmental controls that do not reach the impoverished villages of Malawi and most of the rest of the continent—and completely treatable. There is simply no conceivable excuse for this disease to be taking millions of lives each year.

Our guide to Nthandire is a Christian aid worker, a dedicated and compassionate Malawian working for a local nongovernmental organization (NGO). He and his colleagues work against all odds to help villages such as this one. The NGO has almost no financing available and survives from meager contributions. Its big effort in the village, including this particular household, is to provide a piece of plastic tarpaulin to put under the thatch of each hut's roof. The tarp keeps the children from being completely exposed to the elements, so that when the rains do come, the roof will not leak on the fifteen grandchildren sleeping below. This contribution of a few cents per household is all the aid organization can muster.

As we proceed through the village, other grandmothers share similar stories. Each has lost sons and daughters; those who remain fight for survival. There are only poor in this village. No clinic nearby. No safe water source. No crops in the fields. And notably, no aid. I stoop down to ask one of the young girls her name and age. She looks about seven or eight, but is actually twelve, stunted from years of undernutrition. When I ask her what her dreams are for her own life, she says that she wants to be a teacher, and that she is prepared to study and work hard to achieve that. I know that her chances of surviving to go on to secondary school and a teacher's college are slim under the circumstances in which she lives. Attending school now is a hit-and-miss affair. Children are in and out of school with illness. Their attendance depends on how urgently they are needed at home to fetch water and firewood, or to care for siblings or cousins; on whether they can afford to buy supplies, a uniform, and pay local fees; and on the safety of walking several kilometers to the school itself.

We leave the village and fly later that day to the second city of the

country, Blantyre, where we visit the main hospital in Malawi, Queen Elizabeth Central Hospital. There we experience our second shock of the day. This hospital is the place where the government of Malawi is keen to begin a treatment program for the roughly nine hundred thousand Malawians infected with the HIV virus and currently dying of AIDS because of lack of treatment. The hospital has set up a walk-in clinic for people who can afford to pay the dollar a day cost of the antiretroviral combination therapy, based on Malawi's arrangements with the Indian generic drug producer Cipla, which has pioneered the provision of low-cost antiretroviral drugs to poor countries. Since the government is too impoverished to be able to afford a dollar a day for all those in need, the program has begun for those few Malawians who can afford to pay out of pocket. At the time of our visit, this treatment site is providing anti-AIDS drugs on a daily basis to about four hundred people who can afford it—four hundred people in a country where nine hundred thousand are infected. For the rest, there is essentially no access to anti-AIDS medicines.

We duck into a conference room with the doctor who is overseeing the outpatient service and medical wards. He describes to us the small miracles of the patients on anti-AIDS drug treatment. The response has been dramatic. The success rate of the medicines is nearly 100 percent. The HIV strains do not exhibit drug resistance because the Malawian people have never had access to the drugs before. The doctor also reports that his patients' adherence to this twice-daily regimen has been very high. His patients surely want to stay alive. In short, the doctor is extremely pleased with the results.

Just as his briefing is encouraging us, the doctor stands up and suggests that we visit the medical ward, which lies just across the hall. "Medical ward" is, in fact, a shocking euphemism, because in truth it is not a medical ward at all. It is the place where Malawians come to die of AIDS. There is no medicine in the medical ward. The room has a posted occupancy rate of 150 beds. There are 450 people in the ward. These 450 people are fit into a room with 150 beds by putting three people in or around each bed. In most cases, two people are lying head to toe, toe to head—strangers sharing a death bed. Alongside or underneath the bed there is somebody on the ground, sometimes literally on the ground or sometimes on a piece of cardboard, dying beneath the bed.

The room is filled with moans. This is a dying chamber where three quarters or more of the people this day are in late-stage AIDS without



medicines. Family members sit by the bed, swabbing dried lips and watching their loved ones die. The same doctor who is treating patients across the hall is the doctor in charge of this service. He knows what could be done. He knows that each of these patients could rise from the deathbed but for the want of a dollar a day. He knows the problem is not one of infrastructure or logistics or adherence. He knows that the problem is simply that the world has seen fit to look away as hundreds of impoverished Malawians die this day as a result of their poverty.

I have come to know Malawi relatively well after several visits. A few years earlier, I had been contacted by the vice president of Malawi, Justin Mulawesi, a remarkably fine individual, a dignified, eloquent, and popular figure in what is against all odds a multiparty democracy. The odds are long because democracy is bound to be fragile in an impoverished country where incomes are around 50 cents per person per day, or around \$180 per person per year, and where the stresses of mass disease, famine, and climate shock are pervasive. Amazingly, the Malawians have done it, while the international community has largely stood by through all of this suffering.

Vice President Mulawesi himself has lost several family members to AIDS. The first time we talked about AIDS, he spoke to me through mournful eyes about his new responsibilities as head of the National AIDS Commission. He has led a team of experts to design a national AIDS strategy that could begin to meet this horrific challenge. That team has traveled throughout the world—to Harvard, Johns Hopkins, Liverpool, the London School of Hygiene and Tropical Medicine, and the World Health Organization—to discuss ideas for scaling up the fight against AIDS.

Malawi actually put together one of the earliest and best conceived strategies for bringing treatment to its dying population, and gave an enormously thoughtful response to the challenges of managing a new system of drug delivery, patient counseling and education, community outreach, and the financial flows that would accompany the process of training doctors. On that basis, Malawi made proposals to the international community to help Malawians try to reach about a third of the total infected population (about three hundred thousand people) with anti-AIDS drug treatment within a five-year scale-up period.

Yet international processes are cruel. The donor governments—including the United States and Europeans—told Malawi to scale back its proposal sharply because the first proposal was "too ambitious and

too costly." The next draft was cut back to a mere hundred thousand on treatment at the end of five years. Even that was too much. In a tense five-day period, the donors prevailed on Malawi to cut another 60 percent from the proposal, down to forty thousand on treatment. This atrocious plan was submitted to the Global Fund to Fight AIDS, TB, and Malaria. Incredibly, the donors that run that fund saw fit to cut back once again. After a long struggle, Malawi received funding to save just twenty-five thousand at the end of five years—a death warrant from the international community for the people of this country.

Carol Bellamy of UNICEF has rightly described Malawi's plight as the perfect storm, a storm that brings together climatic disaster, impoverishment, the AIDS pandemic, and the long-standing burdens of malaria, schistosomiasis, and other diseases. In the face of this horrific maelstrom, the world community has so far displayed a fair bit of hand-wringing and even some high-minded rhetoric, but precious little action.

#### BANGLADESH: ON THE LADDER OF DEVELOPMENT

A few thousand miles away from this perfect storm is another scene of poverty. This is poverty in retreat, where the fight for survival is gradually being won, although still with horrendous risks and huge unmet needs. This struggle is being waged in Bangladesh, one of the most populous countries in the world, with 140 million people living in the flood plains of the deltas of the two great rivers, the Brahmaputra and the Ganges, that flow through Bangladesh on their way to the Indian Ocean.

Bangladesh was born in a war for independence against Pakistan in 1971. That year, it experienced massive famine and disarray, leading an official in Henry Kissinger's State Department to famously label it an "international basket case." Bangladesh today is far from a basket case. Per capita income has approximately doubled since independence. Life expectancy has risen from forty-four years to sixty-two years. The infant mortality rate (the number of children who die before their first birthday for every 1,000 born) has declined from 145 in 1970 to 48 in 2002. Bangladesh shows us that even in circumstances that seem the most hopeless there are ways forward if the right strategies are applied, and if the right combination of investments is made.

Still, Bangladesh is not out of the grip of extreme poverty. Although it has escaped the worst of the ravages of famine and disease in the past generation, it faces some profound challenges today. A few months after my visit to Malawi, I was up at dawn one morning in Dhaka, Bangladesh, to see a remarkable sight: thousands of people walking to work in long lines stretching from the outskirts of Dhaka and from some of its poorest neighborhoods. Looking more closely, I noticed that these workers were almost all young women, perhaps between the ages of eighteen and twenty-five. These are the workers of a burgeoning garment industry in Dhaka who cut, stitch, and package millions of pieces of apparel each month for shipment to the United States and Europe.

Over the years, I have visited garment factories all over the developing world. I have grown familiar with the cavernous halls where hundreds of young women sit at sewing machines, and men at cutting tables, where the fabrics move along production lines and the familiar labels of GAP, Polo, Yves Saint Laurent, Wal-Mart, J. C. Penney, and others are attached as the clothing reaches the final stages of production. There is nothing glamorous about this work. The women often walk two hours each morning in long quiet files to get to work. Arriving at seven or seven-thirty, they may be in their seats for most of the following twelve hours. They often work with almost no break at all or perhaps a very short lunch break, with little chance to go to the lavatory. **Leering bosses lean over them, posing a threat of sexual harassment. After a long, difficult, tedious day, the young women trudge back home,** when they are again sometimes threatened with physical assault.

**These sweatshop jobs are the targets of public protest in developed countries; those protests have helped to improve the safety and quality of the working conditions. The rich-world protesters, however, should support increased numbers of such jobs, albeit under safer working conditions, by protesting the trade protectionism in their own countries that keeps out garment exports from countries such as Bangladesh. These young women already have a foothold in the modern economy that is a critical, measurable step up from the villages of Malawi (and more relevant for the women, a step up from the villages of Bangladesh where most of them were born). The sweatshops are the first rung on the ladder out of extreme poverty.** They give lie to the Kissinger state department's forecast that Bangladesh is condemned to extreme poverty.

On one visit to Bangladesh, I picked up an English-language morning newspaper, where I found an extensive insert of interviews with young women working in the garment sector. These stories were poignant, fascinating, and eye-opening. One by one, they recounted the arduous hours, the lack of labor rights, and the harassment. What was most striking and unexpected about the stories was the repeated affirmation that this work was the greatest opportunity that these women could ever have imagined, and that their employment had changed their lives for the better.

Nearly all of the women interviewed had grown up in the countryside, extraordinarily poor, illiterate and unschooled, and vulnerable to chronic hunger and hardship in a domineering, patriarchal society. Had they (and their forebearers of the 1970s and 1980s) stayed in the villages, they would have been forced into a marriage arranged by their fathers, and by seventeen or eighteen, forced to conceive a child. Their trek to the cities to take jobs has given these young women a chance for personal liberation of unprecedented dimension and opportunity.

The Bangladeshi women told how they were able to save some small surplus from their meager pay, manage their own income, have their own rooms, choose when and whom to date and marry, choose to have children when they felt ready, and use their savings to improve their living conditions and especially to go back to school to enhance their literacy and job-market skills. As hard as it is, this life is a step on the way to economic opportunity that was unimaginable in the countryside in generations past.

Some rich-country protesters have argued that Dhaka's apparel firms should either pay far higher wage rates or be closed, but closing such factories as a result of wages forced above worker productivity would be little more than a ticket for these women back to rural misery. For these young women, these factories offer not only opportunities for personal freedom, but also the first rung on the ladder of rising skills and income for themselves and, within a few years, for their children. Virtually every poor country that has developed successfully has gone through these first stages of industrialization. These Bangladeshi women share the experience of many generations of immigrants to New York City's garment district and a hundred other places where their migration to toil in garment factories was a step on the path to a future of urban affluence in succeeding generations.

Not only is the garment sector fueling Bangladesh's economic growth of more than 5 percent per year in recent years, but it is also raising the consciousness and power of women in a society that was long brazenly biased against women's chances in life. As part of a more general and dramatic process of change throughout Bangladeshi society, this change and others give Bangladesh the opportunity in the next few years to put itself on a secure path of long-term economic growth. The countryside that these women have left is also changing quickly, in part because of the income remittances and ideas that the young women send back to their rural communities, and in part because of the increased travel and temporary migration between rural and urban areas, as families diversify their economic bases between rural agriculture and urban manufacturers and services.

In 2003, my colleagues at Columbia and I visited a village near Dhaka with one of the leaders of an inspiring nongovernmental organization, the Bangladeshi Rural Advancement Committee, now known universally as BRAC. There we met representatives from a village association, which BRAC had helped to organize, in which women living about an hour outside the city were engaged in small-scale commercial activities—food processing and trade—within the village and on the roads between the village and Dhaka itself. These women presented a picture of change every bit as dramatic as that of the burgeoning apparel sector.

Wearing beautiful saris, the women sat on the ground in six rows, each with six women, to greet us and answer questions. Each row represented a subgroup of the local "microfinance" unit. The woman in the front of the row was in charge of the borrowing of the whole group behind her. The group in each line was mutually responsible for repayments of the loans taken by any member within the line. BRAC and its famed counterpart, Grameen Bank, pioneered this kind of group lending, in which impoverished recipients (usually women) are given small loans of a few hundred dollars as working-capital for microbusiness activities. Such women were long considered unbankable, simply not credit-worthy enough to bear the transaction costs to receive loans. Group lending changed the repayment dynamics: default rates are extremely low, and BRAC and Grameen have figured out how to keep other transaction costs to a minimum as well.

Perhaps more amazing than the stories of how microfinance was fueling small-scale businesses were the women's attitudes to child rearing.

When Dr. Allan Rosenfield, dean of Columbia University's Mailman School of Public Health and one of the world's leading experts on reproductive health, asked the women how many had five children, no hands went up. Four? Still no hands. Three? One nervous woman, looking around, reluctantly put her hand in the air. Two? About 40 percent of the women. One? Perhaps another 25 percent. None? The remainder of the women. Here was a group where the average number of children for these mothers was between one and two children.

Rosenfield then asked them how many they wanted in total. He again started at five—no hands. Four? No hands. Three? No hands. Two? Almost all the hands went up. This social norm was new, a demonstration of a change of outlook and possibility so dramatic that Rosenfield dwelt on it throughout the rest of our visit. He had been visiting Bangladesh and other parts of Asia since the 1960s, and he remembered vividly the days when Bangladeshi rural women would typically have had six or seven children.

The jobs for women in the cities and in rural off-farm microenterprises; a new spirit of women's rights and independence and empowerment; dramatically reduced rates of child mortality; rising literacy of girls and young women; and, crucially, the availability of family planning and contraception have made all the difference for these women. There is no single explanation for the dramatic, indeed historic, reduction in desired rates of fertility: it is the combination of new ideas, better public health for mothers and children, and improved economic opportunities for women. The reduced fertility rates, in turn, will fuel Bangladesh's rising incomes. With fewer children, a poor household can invest more in the health and education of each child, thereby equipping the next generation with the health, nutrition, and education that can lift Bangladesh's living standards in future years.

Bangladesh has managed to place its foot on the first rung of the ladder of development, and has achieved economic growth and improvements of health and education partly through its own heroic efforts, partly through the ingenuity of NGOs like BRAC and Grameen Bank, and partly through investments that have been made, often at significant scale, by various donor governments that rightly viewed Bangladesh not as a hopeless basket case but as a country worthy of attention, care, and development assistance.

INDIA: CENTER OF AN EXPORT  
SERVICES REVOLUTION

If Bangladesh has one foot on the ladder, India is already several steps up the ladder. The young woman whose computer screen I peered over, in an information technology center in Chennai, is a prototypical employee of the new India. She is twenty-five years old and a graduate of a local teacher's college where she obtained a two-year degree following high school. Now she works as a transcriber of data for a new Indian information technology (IT) company operating in the capital of the southern state of Tamil Nadu. Chennai is a center of India's IT revolution, one that is beginning to fuel unprecedented economic growth in this vast country of one billion people. The IT revolution is creating jobs that are unknown in Malawi and still largely unthinkable in Bangladesh, but that are becoming the norm for educated young women in India.

This company has a remarkable arrangement with a hospital in Chicago, where doctors dictate their charts and transmit them by satellite to India as voice files at the end of each work day in Chicago. Because of the ten-and-a-half-hour time zone difference, the end of each work day in Chicago is the beginning of another in Chennai. When the voice files are received, dozens of young women who have taken a special course in medical data transcription sit in front of computer screens with headphones in place and speedily type in the medical charts of patients almost ten thousand miles away. I listened, for a short bit, to the transcription. The workers there know the medical jargon much better than I do because of their intensive training course and experience. They earn about \$250 to \$500 a month, depending on their level of experience, between a tenth and a third of what a medical data transcriber might earn in the United States. Their income is more than twice the earnings of a low-skilled industrial worker in India and perhaps eight times the earnings of an agricultural laborer.

The entrepreneur who started up this firm has close relatives in the United States who made the business connections on the U.S. side. Now the business is thriving. It is moving from data transcription to financial record keeping, and soon into financial consulting and advising for American companies, as well as back-office processing operations, or BPO in the new jargon of the global economy. Its employees work in gleaming buildings with broadband Internet facilities, satellite hook-

ups, and videoconferencing capability for the heads of operations who have to be in face-to-face contact with their counterparts in the United States. They have access to hygienic facilities. They are women whose mothers, typically, were the first in the family to become literate and to gain a foothold in the urban economy (perhaps as seamstresses in the sweatshops), and whose grandmothers were almost without a doubt rural laborers in the overwhelmingly village economy of two generations before.

India is vast. Many parts of India, particularly in the north, are still caught in the same back-breaking rural poverty that grips Malawi and parts of Bangladesh. Much of urban India resembles Dhaka. Only a few leading "growth poles" share the cutting-edge feel of IT-driven Chennai. Throughout the Ganges Valley of northern India, home to two hundred million Indians living in the vast plains of India's greatest river, the IT revolution has been slow to emerge, if it has emerged at all. Yet so powerful are the new trends in India, not only in IT but also in textiles and apparel, electronics, pharmaceuticals, automotive components, and other sectors, that the overall economic growth of India is reliably now 6 percent or more per year. India is beginning to nip at the heels of China's growth rates, and investors around the world are warming to the notion of establishing operations, from IT to manufacturing to research and development, in the fast-growing Indian economy.

Progress is hard enough to achieve in the world without being perceived as a danger. One of the ironies of the recent success of India and China is the fear that has engulfed the United States that success in these two countries comes at the expense of the United States. These fears are fundamentally wrong and, even worse, dangerous. They are wrong because the world is not a zero-sum struggle in which one country's gain is another's loss, but is rather a positive-sum opportunity in which improving technologies and skills can raise living standards around the world. Not only are the Indian IT workers providing valuable goods and services to United States consumers, but they are also sitting at terminals with Dell computers, using Microsoft and SAP software, Cisco routers, and dozens of other empowering pieces of technology imported from the developed countries. As India's economy grows, its consumers opt for a growing array of U.S. and European goods and services for their homes and businesses.



## CHINA: THE RISE OF AFFLUENCE

Following another visit to India, I continued on to Beijing, China, where economic development is speeding ahead at full throttle. Beijing has emerged not only as a major capital of the developing world, but also as one of the world's economic capitals. It is now a booming city of eleven million. Annual income has surpassed \$4,000 per capita, and the Chinese economy continues to soar at above 8 percent growth per annum.

On one particular night, I was the guest of two young couples, truly young urban professionals, who took me to one of the trendiest night-spots of the city. I tried to listen to them over the operatic duet taking place on the stage, a kind of retrochic performance in which a Mao-era revolutionary opera was being performed for a room filled with very well-dressed young business executives. Every table had at least one, and usually half a dozen, cell phones lying on it in case any of the hotshot young businessmen and -women received calls from clients or the office. As I peered at the opera out of a corner of my eye, my hosts showed me the new cell phones they had just purchased that were also digital cameras. They demonstrated them by sending a picture of me from one phone to the other. This was a gadget that I had not yet seen back home.


I would not have been so stunned had I been in London or New York or Paris or Tokyo. But I was in a country that twenty-five years ago was still emerging from the chaos of the Cultural Revolution and decades of turmoil under Mao Tse-tung. Within a single generation, China has become one of the most important economies and trading powers of the world.

These young Chinese men and women have the chance to attain tremendous affluence, to travel the world, and to enjoy the other benefits of the high living standards available to them because of the powers of globalization. China's great advance during the past twenty-five years reflects the fact that within two decades, it has gone from being a virtually closed society and economy to one of the great export powers of the world. Its exports have been fueled by a vast inflow of foreign investment and technology, which brought the money to build modern factories together with the machinery and techniques to run them, in combination with relatively low-cost Chinese workers who are increasingly proficient in skills of all sorts. The result has been the rise, in one industry after another, of highly competitive enterprises that have in-

creased China's exports from around \$20 billion in 1980 to around \$400 billion in 2004.

## ASCENDING THE LADDER OF ECONOMIC DEVELOPMENT

What do these four widely divergent images of the globe show us? We see an almost unimaginable divide between the richest and poorest parts of the world, with all the gradations in between. We glimpse the pivotal roles that science and technology play in the development process. And we sense a progression of development that moves from subsistence agriculture toward light manufacturing and urbanization, and on to high-tech services. In Malawi, 84 percent of the population lives in rural areas; in Bangladesh, 76 percent; in India, 72 percent; and in China, 61 percent. In the United States, at the other upper end of the development spectrum, it is just 20 percent. Services account for under 25 percent of employment in Malawi, whereas in the United States, they account for 75.



If economic development is a ladder with higher rungs representing steps up the path to economic well-being, there are roughly one billion people around the world, one sixth of humanity, who live as the Malawians do: too ill, hungry, or destitute even to get a foot on the first rung of the development ladder. These people are the "poorest of the poor," or the "extreme poor" of the planet. They all live in developing countries (poverty does exist in rich countries, but it is not extreme poverty). Of course, not all of these one billion people are dying today, but they are all fighting for survival each day. If they are the victims of a serious drought or flood, or an episode of serious illness, or a collapse of the world market price of their cash crop, the result is likely to be extreme suffering and perhaps even death. Cash earnings are pennies a day.

A few rungs up the development ladder is the upper end of the low-income world, where roughly another 1.5 billion people face problems like those of the young women in Bangladesh. These people are "the poor." They live above mere subsistence. Although daily survival is pretty much assured, they struggle in the cities and countryside to make ends meet. Death is not at their door, but chronic financial hardship and a lack of basic amenities such as safe drinking water and functioning latrines are part of their daily lives. All told, the extreme poor (at

around 1 billion) and the poor (another 1.5 billion) make up around 40 percent of humanity.

Another 2.5 billion people, including the Indian IT workers, are up yet another few rungs, in the middle-income world. These are middle-income households, but they would certainly not be recognized as middle class by the standards of rich countries. Their incomes may be a few thousand dollars per year. Most of them live in cities. They are able to secure some comfort in their housing, perhaps even indoor plumbing. They can purchase a scooter and someday even an automobile. They have adequate clothing, and their children go to school. Their nutrition is adequate, and some are even falling into the rich-world syndrome of unhealthy fast food.

Still higher up the ladder are the remaining one billion people, roughly a sixth of the world, in the high-income world. These affluent households include the billion or so people in the rich countries, but also the increasing number of affluent people living in middle-income countries—the tens of millions of high-income individuals in such cities as Shanghai, Sao Paulo, or Mexico City. The young professionals of Beijing are among the fortunate one sixth of the world enjoying twenty-first-century affluence.

The good news is that well more than half of the world, from the Bangladesh garment worker onward, broadly speaking, is experiencing economic progress. Not only do they have a foothold on the development ladder, but they are also actually climbing it. Their climb is evident in rising personal incomes and the acquisition of goods such as cell phones, television sets, and scooters. Progress is also evident in such crucial determinants of economic well-being as rising life expectancy, falling infant mortality rates, rising educational attainment, increasing access to water and sanitation, and the like.

The greatest tragedy of our time is that one sixth of humanity is not even on the development ladder. A large number of the extreme poor are caught in a poverty trap, unable on their own to escape from extreme material deprivation. They are trapped by disease, physical isolation, climate stress, environmental degradation, and by extreme poverty itself. Even though life-saving solutions exist to increase their chances for survival—whether in the form of new farming techniques, or essential medicines, or bed nets that can limit the transmission of malaria—these families and their governments simply lack the financial means to make these crucial investments. The world's poor know about the



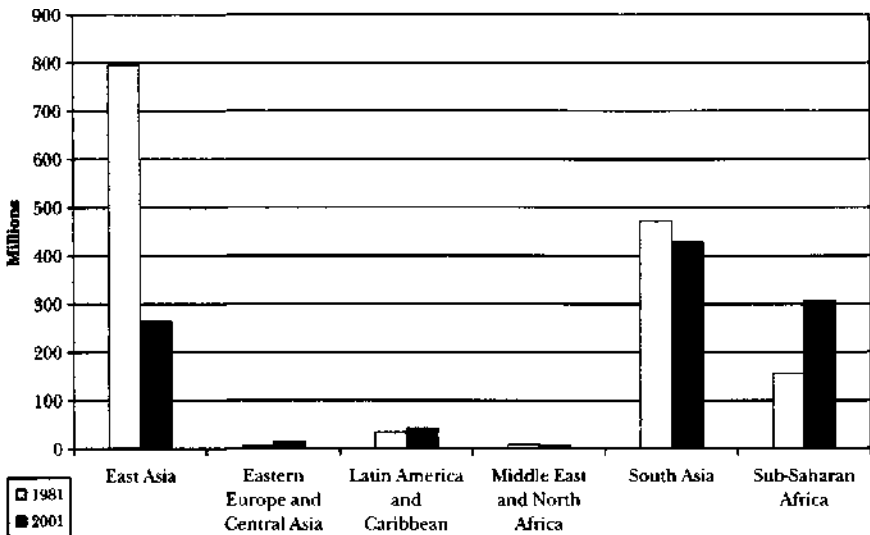
development ladder: they are tantalized by images of affluence from halfway around the world. But they are not able to get a first foothold on the ladder, and so cannot even begin the climb out of poverty.

## WHO AND WHERE ARE THE POOR?

There are many definitions, as well as intense debates, about the exact numbers of the poor, where they live, and how their numbers and economic conditions are changing over time. It is useful to start with what is agreed, and then to mention some of the areas of debate. As a matter of definition, it is useful to distinguish between three degrees of poverty: extreme (or absolute) poverty, moderate poverty, and relative poverty. Extreme poverty means that households cannot meet basic needs for survival. They are chronically hungry, unable to access health care, lack the amenities of safe drinking water and sanitation, cannot afford education for some or all of the children, and perhaps lack rudimentary shelter—a roof to keep the rain out of the hut, a chimney to remove the smoke from the cook stove—and basic articles of clothing, such as shoes. Unlike moderate and relative poverty, extreme poverty occurs only in developing countries. Moderate poverty generally refers to conditions of life in which basic needs are met, but just barely. Relative poverty is generally construed as a household income level below a given proportion of average national income. The relatively poor, in high-income countries, lack access to cultural goods, entertainment, recreation, and to quality health care, education, and other perquisites for upward social mobility.

The World Bank has long used a complicated statistical standard— income of \$1 per day per person, measured at purchasing power parity—to determine the numbers of extreme poor around the world. Another World Bank category, income between \$1 per day and \$2 per day, can be used to measure moderate poverty. These measures feature prominently in public policy circles, and most recently were estimated by World Bank economists Shaohua Chen and Martin Ravallion. They estimated that roughly 1.1 billion people were living in extreme poverty in 2001, down from 1.5 billion in 1981. Figure 1a shows the distribution of the world's extreme poor by region. Each bar signifies the number of poor in the region, with the first bar indicating the number in 1981, the

Figure 1a: Numbers of Extreme Poor



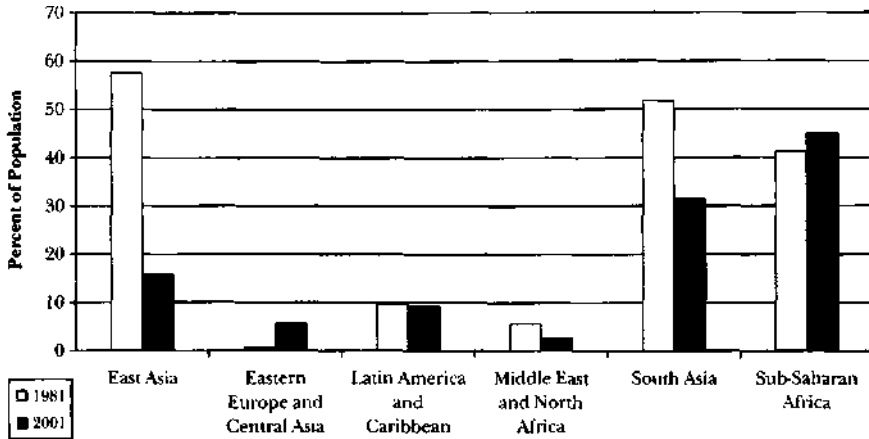
Source: Data from *Chen and Ravallion (2004)*.

second bar, in 2001. The overwhelming share of the world's extreme poor, 93 percent in 2001, live in three regions: East Asia, South Asia, and sub-Saharan Africa. Since 1981, the numbers of extreme poor have risen in sub-Saharan Africa, but have fallen in East Asia and South Asia.

Figure 1b repeats the same measurement, but now shows the proportion of the region's population in extreme poverty, rather than the absolute number. **Almost half of Africa's population is deemed to live in extreme poverty, and that proportion has risen slightly over the period.** The proportion of the extreme poor in East Asia has plummeted, from 58 percent in 1981 to 15 percent in 2001; in South Asia the progress has also been marked, although slightly less dramatically, from 52 percent to 31 percent. Latin America's extreme poverty rate is around 10 percent, and relatively stuck; Eastern Europe's rose from a negligible level in 1981 to around 4 percent in 2001, the result of the upheavals of communist collapse and economic transition to a market economy.

Figures 2a and 2b show the calculations for the moderate poor, those living between \$1 and \$2 per day. **East Asia, South Asia, and sub-Saharan Africa continue to dominate the picture, with 87 percent of the world's 1.6 billion moderately poor.** The numbers of moderate poor in East Asia and South Asia have actually risen as the poorest households

Figure 1b: Proportion Living in Extreme Poverty



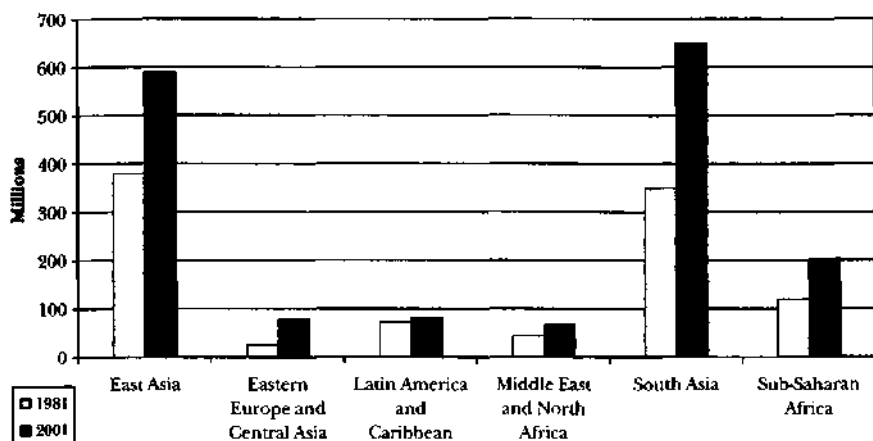
Source: Data from Chen and Ravallion (2004).

have improved their circumstances from extreme poverty to moderate poverty. Some 15 percent of Latin Americans live in moderate poverty, a rate that has been fairly constant since 1981.

Map 1 gives us yet another perspective on these data, on a country-by-country basis. Each country is shaded according to the proportion of the population living in extreme poverty and moderate poverty. A country as a whole is deemed to suffer from extreme poverty if the proportion of the population in extreme poverty is at least 25 percent of the total. A country is categorized as suffering from moderate poverty if it is not in extreme poverty, but at least 25 percent of the households are extremely poor or moderately poor, that is, living under \$2 per day. Most of the countries of sub-Saharan Africa are in extreme poverty (and even more would be in this category but for lack of reliable data), as are the countries of South Asia. East Asia and Latin America include many countries in moderate poverty, but also many that have risen beyond moderate poverty in recent decades.

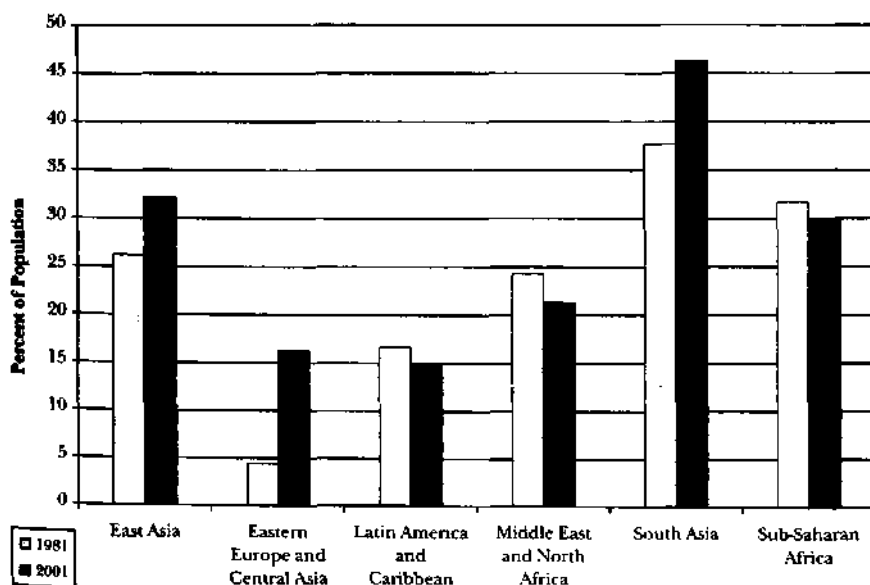
The precision of the World Bank figures have been questioned in heated debates. The World Bank has relied on household surveys, while other researchers have relied on national income accounts, which tend to show somewhat faster progress in the reduction of Asian poverty. The details need not detain us here, except to say that the general picture remains true in either case: extreme poverty is concentrated in East Asia,

Figure 2a: Numbers of Moderate Poor



Source: Data from Chen and Ravallion (2004).

Figure 2b: Proportion Living in Moderate Poverty



Source: Data from Chen and Ravallion (2004).

South Asia, and sub-Saharan Africa. It is rising in Africa in absolute numbers and as a share of the population, while it is falling in both absolute numbers and as a proportion of the population in the Asian regions.

We will have many occasions to discuss the specific circumstances of the poorest of the poor. They are mainly in rural areas, though with a growing proportion in the cities. They face challenges almost unknown in the rich world today—malaria, massive droughts, lack of roads and motor vehicles, great distances to regional and world markets, lack of electricity and modern cooking fuels—challenges that are at first harrowing to contemplate, but on second thought encouraging, precisely because they also lend themselves to practical solutions.

## OUR GENERATION'S CHALLENGE

The very hardest part of economic development is getting the first foothold on the ladder. Households and countries at the very bottom of the world's income distribution, in extreme poverty, tend to be stuck. Countries already on the ladder of development, such as Bangladesh and India, are generally making progress, even if it is uneven and sometimes painfully slow. Our generation's challenge is to help the poorest of the poor to escape the misery of extreme poverty so that they may begin their own ascent up the ladder of economic development. The end of poverty, in this sense, is not only the end of extreme suffering but also the beginning of economic progress and of the hope and security that accompany economic development.

When I speak of the "end of poverty," therefore, I will be speaking of two closely related objectives. The first is to end the plight of one sixth of humanity that lives in extreme poverty and struggles daily for survival. Everybody on Earth can and should enjoy basic standards of nutrition, health, water and sanitation, shelter, and other minimum needs for survival, well-being, and participation in society. The second is to ensure that all of the world's poor, including those in moderate poverty, have a chance to climb the ladder of development. As a global society, we should ensure that the international rules of the game in economic management do not advertently or inadvertently set snares along the lower rungs of the ladder in the form of inadequate development assistance, protectionist trade barriers, destabilizing global financial practices,



poorly designed rules for intellectual property, and the like, that prevent the low-income world from climbing up the rungs of development.

The end of extreme poverty is at hand—within our generation—but only if we grasp the historic opportunity in front of us. There already exists a bold set of commitments that is halfway to that target: the Millennium Development Goals (MDGs), the eight goals that all 191 UN member states unanimously agreed to in 2002 by signing the United Nations Millennium Declaration. These goals are important targets for cutting poverty in half by the year 2015, compared with a baseline of 1990. They are bold but achievable, even if dozens of countries are not yet on track to achieve them. They represent a crucial midstation on the path to ending extreme poverty by the year 2025. And the rich countries have repeatedly promised to help the poor countries to achieve them through increased development assistance and improved global rules of the game.

These, then, are the economic possibilities of our time:

- To meet the Millennium Development Goals by 2015
- To end extreme poverty by 2025
- To ensure well before 2025 that all of world's poor countries can make reliable progress up the ladder of economic development
- To accomplish all of this with modest financial help from the rich countries, more than is now provided, but within the bounds of what they have long promised.

To meet these challenges, we first have to understand how we got to where we are, for in that understanding we will also find the way forward.