



BY JEFFREY SACHS

Ending extreme poverty, disease, environmental degradation, war? We asked one of the world's most influential economists—adviser to Kofi Annan and Bono

alike—what would have to be done to put the world on a course to do exactly that. What follows is his modest little plan.

PHOTO ILLUSTRATIONS BY PAUL SAHRE

IT IS INCREASINGLY HARD to believe the old adage that “people get the government they deserve.” Despite having everything going for it—wealth, technology, unchallenged military might—the United States is facing a spiraling crisis made in Washington: a budget deficit of gargantuan proportions, a voracious military budget that buys us neither security nor peace of mind, a reckless neglect of man-made climate change, and a foreign policy that in three short years has made us one of the most feared countries on the planet. This is a crisis, I believe, that reflects profoundly misplaced priorities regarding America’s relations with the world. In this article, I want to advance some concrete ideas on how to set those priorities right.

In spite of our problems, I am an optimist—not an incorrigible optimist, but one based on facts. It is for this simple reason: The key problems that we have are all indeed solvable. Every great challenge that we face—climate, biodiversity, global health, extreme poverty, growing violence, and the “clash of civilizations”—can be solved, and at modest cost and with huge long-term benefit. We’re facing the bargain of a generation, a chance to fix the world and forge a prosperous and peaceful place for the rest of the century.

The world is racked by instability resulting from “failed states,” places where hunger, death, and disease flourish and where young men rampage in the face of poverty, mass unemployment, lack of education, and hopelessness. Yet the problems of extreme poverty are not the visitations of God’s plagues

on corrupt and

hapless nonbelievers, but rather the result of societies suffering from the lack of health clinics, a shortage of schools and teachers, lack of rural roads, and the like. These countries need major investments in social services and infrastructure but simply lack the resources. The result is a poverty trap in which solvable poverty gets only deeper because the basic investments needed to overcome it are beyond the means of the country, while the scale of financial help from the United States, European countries, and other rich nations is much too limited to make a breakthrough. Remarkably, the United States is spending about \$450 billion for the military to defend itself against global threats but only about \$13 billion to fight the underlying conditions of poverty, disease, and despair that provide the breeding grounds for these global threats.

It’s possible to add up, with some precision, what financial resources would actually be needed from the rich countries to help end this extreme poverty and thereby set today’s unstable and desperate societies—Ethiopia, Haiti, Bolivia, Afghanistan, and dozens of countries like them—on their way to self-sustaining economic growth. By helping these countries rise above extreme poverty, we would also enable them to become stable neighbors and trading partners instead of havens of terror, disease, unwanted mass migration, and drug trafficking.

From 2000 to 2001, I chaired the Commission on Macroeconomics and Health for the World Health Organization. I was asked by the wondrous head of the WHO at the time, Dr. Gro



It's a wonderful thing to have a detailed, fact-filled engagement, one that gets past sound bites and posturing. When disagreements arose, we actually checked the data. We commissioned papers and made calculations. And something very important happened that is a more general lesson for the world: The commission actually reached a consensus. We found that the health crisis in Africa and other impoverished regions was indeed causing a poverty trap. Massive proportions of the poor are sick and dying, and sick people are unable to generate income and pay taxes. Without household incomes and with bankrupt governments, health systems have collapsed and epidemics are running unchecked. To break this vicious cycle, the rich countries would have to help.

But could we afford it? The answer was both shocking and heartening. While the health bill was too much for countries living at one one-hundredth of our per-capita income levels (\$300 per person per year in Ghana, as opposed to \$39,000 per person per year in the U.S.), the bill was extremely modest considering the rich world's income. Specifically, the commission discovered that the rich world, at a tiny cost to itself, could save around eight million people each year in the poorest countries, a large proportion of whom are children dying before their fifth birthday. And by saving these lives, the world's population growth would actually slow in the coming decades, as poor families choose to have many fewer children in response to the higher survival rates. So how much would it cost to achieve these fabulous results? About \$25 billion per year from the rich world could do the job, permitting a massive attack on AIDS, tuberculosis, malaria, vaccine-preventable diseases, and unsafe childbirth, among other killer conditions.

■ Solving humankind's most pernicious problems is within our reach for the first time. We are facing a unique, historic opportunity, and the U.S. must take the lead.

Harlem Brundtland, to bring together a bunch of hardheaded finance types with the softhearted folks of public health to see how best to confront the health disasters of the poor world and how much it would cost. The worlds of finance and public health rarely intersect, much less brainstorm together. At the start of the process, the finance folks from the IMF and the World Bank were wont to blame the poor for much of their misery: *"If only they would stop squandering money through corruption and mismanagement, they'd have better health care."* The public-health folks were wont to look at the situation from the opposite point of view: *"If only the poor weren't so sick all of the time, they'd have the energy and wherewithal to earn their way out of poverty."*

So \$25 billion seems like a lot until one realizes that the same rich world—and here I refer to the United States, Canada, Western Europe, Japan, Australia, and New Zealand—has an annual income of about \$25 trillion, so we are talking about one one-thousandth of our annual income, or just ten cents per every hundred dollars of GNP. I was taught growing up that it would be really something to save a life, much less eight million lives each year. We grew up in the shadow of the Holocaust, with its six million martyrs. So could we even consider, for a moment, that ten cents per one hundred dollars of income would be too much to rescue the poor world from its current misery, especially since that misery is washing up on our shores in so many ways?

For years, I have battled with many conservatives in Washington who said not to dream about \$25 billion from the rich world (with the U. S. share of that being perhaps half), even to save millions of lives per year. I have watched as President Bush surrendered more than \$200 billion in annual tax collections *from the rich*. I have watched as the military budget bulged to \$450 billion this year, up an amazing \$150 billion since the time the administration came into office. Then the president asked for \$87 billion for Afghanistan and Iraq, but now Americans are beginning to see more clearly what we are getting for our \$87 billion and how much better we might be using it.

It's important to acknowledge that improved health care for the world's poor is not enough for the kind of worldwide breakthrough from extreme poverty that we should seek. To help Africa, Central Asia, the Andean countries, and other tortured regions of the impoverished world escape from their economic and social misery, the rich world would have to help these countries make major investments not only in health, but also in education, roads, power, water, sanitation, and more. One might imagine that such a full panoply of help really would be too expensive for the U. S. and the other rich countries. But that guess, surprisingly, is wrong.

As in the WHO project, I've been asked to help lead an assessment of that very question, this time as special adviser to UN Secretary General Kofi Annan. The UN Millennium Project, which I'm honored to direct for the secretary general, is looking into the broad range of policies and investments that would be needed to help spring about a billion people from the poverty that cripples their lives and destabilizes the world. Once again, the strategy is what I've come to call "analytical deliberation," meaning a detailed and thorough discussion and analysis with people from many different specialties and interest groups.

The UN Millennium Project's work will not be completed until 2005, but the preliminary work is as heartening as the findings of the WHO commission. Specifically, the end of abject poverty is within reach. It's not a crazy dream but a hardheaded financial concept. If the poor countries exercise responsible leadership on their part and the rich world pitches in to help finance the clinics, schools, roads, power stations, and soil improvements, not only could Africa survive, but it could thrive. Not only would today's hot spots cease to be terror havens, but they could become respectable players in a world economy that would be much more effective at spreading economic prosperity.

As a first approximation, we have found that in addition to \$25 billion or so for investments in health, we'd probably need another \$50 billion or so from the rich world to address the interconnected challenges of education, roads, and the rest, for a total of about \$75 billion per year. Perhaps half of that, roughly \$35 billion, would come from the United States. To put the amount in context, \$35 billion amounts to thirty-five cents for every hundred dollars of U. S. GNP. The most important point is that the rich world's money wouldn't go for a lark or for Swiss bank accounts or up in smoke, as in Iraq, but would all go for specific, identifiable, and measurable investments, such as antimalaria drugs and bed nets; antiretroviral medicines for Africa's dying AIDS patients; new wells and pit latrines in the countryside; and feeder roads to carry farm goods to the cities, thereby enriching both impoverished farmers and struggling slum dwellers.

Suddenly, then, a bit of dry macroeconomic accounting translates into the stuff of life and death on the planet. Suppose that the United States must decide whether to spend another \$35 billion per year on foreign assistance to the world's poor coun-

tries. Can we afford it? Well, it's about one seventh of President Bush's tax cuts. It's about half of our annual Iraq spending. It's about one fourth of the recent increase in U. S. military spending, and just one twelfth of our total military budget. In short, we could easily afford this if we'd simply realize that we've gone way overboard in military approaches to our security while neglecting the much cheaper and more satisfying route of crisis prevention by spreading prosperity and hope.

The shocking fact, unknown to most Americans, is that the U. S. contribution to development aid, when measured as a percentage of GNP, is actually the lowest of any of the twenty-two donor countries. Sweden, for example, gives 0.87 percent of its GNP, while the U. S. currently gives just 0.13 percent of its own. In other words, we are currently giving thirteen cents per hundred dollars of income, while we might need to give another thirty-five to fifty cents to get the job done. In 2002, the Bush administration actually promised, in an international agreement known as the Monterrey Consensus, to make "concrete efforts" toward contributing 0.7 percent of GNP to developing aid, which would be more than enough to address the needs of the poorest countries. The White House has ignored the goal from the moment it signed the Monterrey document, and you, dear reader, have almost surely never even heard about that pledge. Alas, the poor countries know all too well that the U. S. made the pledge and then quickly broke it.

But the United States cannot ignore its obligations to the world any longer. Set aside, for the moment, the American value of altruism. Speaking strictly from self-interest, we must bear these costs to assure a peaceful century. And we must consider them an investment that will ultimately save us untold treasure while sparing us untold pain.

While we're at it, there are other things we've got to do as well. We need a new compass to steer America's course in the world. No simple set of rules could hope to cover the global exigencies ahead, but based on my own travels to more than a hundred countries and my experience advising dozens of governments, I would propose some key points about our world, our hopes, and our challenges that have been systematically subverted in our recent misadventures.

**We are not at war
(except with our own
demons)**

NEW YORK TIMES JOURNALIST Thomas Friedman proclaimed that the terrorists' attack of September 11, 2001, was the start of World War III, and of course for our government this was the start of an open-ended war on terror. This was a very bad idea, not only wrong in diagnosis, but vulnerable to becoming a self-fulfilling and self-destructive reality. Another turn of that self-fulfilling prophecy hit in the Madrid bombings. When the U. S. responded to 9/11 with a war on Iraq based on ill-informed or phony presuppositions about weapons of mass destruction and links to al Qaeda, Spain joined our erroneous war and has now been brutally targeted by radical Islamic terrorists. The violence has escalated, not only in Madrid, but in a swath of bombings across East Africa, the Middle East, and Asia. Our war on terror is doing more to foment violence than to tamp it down.

Before it's too late, let's understand that we are not in a twilight struggle for survival, that September 11 did not change

everything (unless we let it do so), and that it's time to get back to the real challenges facing us and our world before it's truly too late. Three thousand people died at the World Trade Center on September 11, 2001. At least ten thousand Africans die every day from AIDS, TB, and malaria.

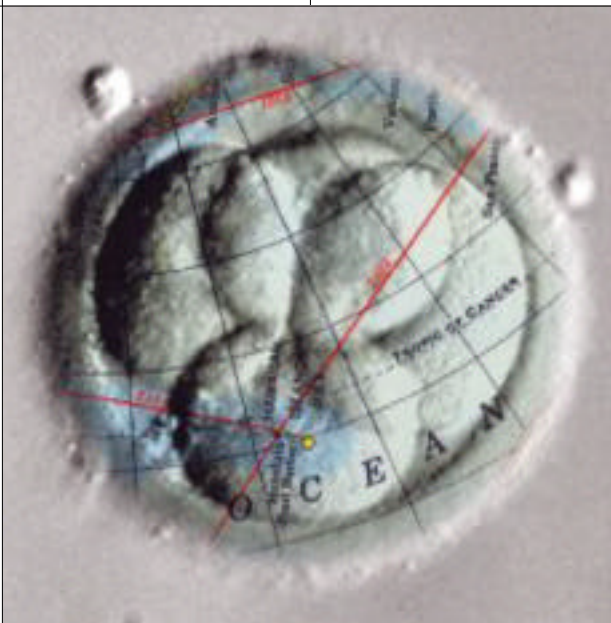
I am not advocating a retreat in the face of terrorism, but I am advocating being a lot smarter and less obsessed than President Bush is. Terrorist cells must be tracked down and stopped, but we don't have to do this in ways that alienate the entire world. The war in Iraq was the opposite of what was needed. It inflamed Iraq, and U. S. citizens and U. S. sympathizers like Spain are being targeted in dozens of countries. The State Department's "travel advisories" cover vast swaths of Africa, the Middle East, and Asia, seriously disrupting tourism, foreign investment, and trade. In the name of national security, the U. S. has canceled or delayed student visas for thousands of Muslim students from Africa, the Middle East, and Asia, creating a new wave of ill will among young and educated students who are likely to be tomorrow's leaders.

We forget that people in other countries are living and breathing human beings with families, aspirations, and even bills to pay. They are not mere objects of our manipulation. The vast majority of the Islamic world would like nothing more than to live peacefully with the United States, with mutually beneficial trade, and with their children studying at U. S. universities. And yet this same vast majority has utterly lost faith in U. S. intentions, as we have invaded their countries, been blind to their struggles for economic survival and dignity, tried to impose colonial-style occupation in Iraq, and failed miserably to promote a balanced two-state solution to the Israeli-Palestinian conflict.

The real struggle is living together on a crowded planet

THE SINGLE MOST IMPORTANT FACT of global society is that there are now 6.3 billion of us, rising to 8 to 9 billion by mid-century, compared with just 1.6 billion at the turn of the last century. The result is that we are putting pressures on the land and the oceans at an alarming rate, and we willfully continue to ignore the dire consequences of our own actions. Scientists reported this year that almost all of the world's great ocean fisheries are in a precipitous decline from overfishing. At the same time, long-term, man-made climate change is beginning to wreak havoc as well, including last summer's once-in-five-thousand-years heat wave in Europe.

There is no simple turning back from this unprecedented demographic situation, short of catastrophe. The good news is that



Two billion people will be added to the world's poor cities in the next thirty years. Will teeming populations find hope, or will they join ranks with bin Laden?

the total human population will most likely level off later this century, while the bad news is that there will be several billion more of us by then, adding more stress to the world's ecological systems, as well as to one another. Our greatest societal and ecological challenge is therefore to live peacefully and prosperously in a crowded world. Massive population centers can be highly fulfilling—just come to New York City—but they can also easily explode ecologically and politically unless we are vastly more careful, prudent, and empathetic than we are today.

New York shows, indeed, how people from every conceivable nationality and ethnicity can live cheek by jowl peacefully and efficiently. But

New York depends on an astounding array of institutions to protect public health; to keep the water supply safe; to chase down cases of SARS, TB, and West Nile virus; to keep the roads, bridges, subways, and power grids functioning. And it all works, most of the time, as long as the city keeps investing in the future. Drop the ball, squander it in war, return it in unaffordable tax cuts, and woe be to our future.

More to the point, we will see about two billion people added to the world's cities in the poor countries in the next thirty years, an astounding challenge for the local and global environment. Will the teeming populations find jobs, or will American protectionism close off their hopes for a better future? Will young men in Pakistan and Peru become computer programmers because they can export their services to the U. S., or will they become bin Laden or Shining Path sympathizers because we have closed off their avenues of economic improvement? Will our current irrational phobia about exporting jobs (i.e., allowing poor countries to sell to us just as we sell to them) blind us to the fact that it is through open trade and open circulation of people and ideas that we have the best hope of living peacefully in a crowded world?

Science got us here, and science will see us through

OF THE 6.3 BILLION OF US on the planet, more than 1 billion are living in luxury and security unimaginable in the past, and another 4 billion are living well above subsistence levels. Without science, we would all be living—and struggling for survival—like the poorest 1 billion, the bottom sixth of the world's population. The world's poorest live the way that virtually all of humanity lived before the onset of the scientific and industrial revolutions of the nineteenth century. Indeed, without science, we wouldn't have the ability to feed 6.3 billion people, much less the additional 3 billion or so on the way. It was basic scientific advances such as the Haber-Bosch

process (which takes atmospheric nitrogen and converts it into nitrogen-based fertilizer) that made possible the enormous increases in food production over the past hundred years, and thereby the escape from chronic hunger and extreme poverty for much of the world.

Yet while science has been the handmaiden of progress, our society understands little of the science that sustains us, or of the warnings coming from the scientific community about the profound damage we are doing to the world's ecosystems and the profound risks we are creating for ourselves. If too many Americans continue to imagine that science is for nerds and that creationism is for real men, we will never overcome the vertiginous risks ahead. Every day our society lives off of the discoveries of quantum physics and biology—our computers would be impossible without semiconductors, and our new medicines would be impossible without modern molecular biology—even as large parts of our society remain addicted to pseudoscience. The Bush administration has been particularly mean-spirited in its attacks on the scientific community, a combination of true ignorance of science and a campaign to court the fundamentalist-Christian vote.

In 2001 a Gallup survey found that only 12 percent of Americans actually subscribe to the modern Darwinian theory of evolution, with another 37 percent declaring their belief in a God-directed evolution. A remarkable 45 percent of Americans prefer a fundamentalist version of creation. While we might wish to leave the creationists to their blissful ignorance, we can't really afford that luxury. Not only are many of the scientifically illiterate intent on damaging the education system for the rest by promoting creationism, but the public's scientific ignorance contributes to innumerable areas of public-policy denial, such as our government's malign neglect of human-made climate change. Climate change is dismissed, for example, on the editorial page of *The Wall Street Journal*, which has become a bastion of scientific ignorance whose sputtering nonsense encourages confusion and immobility of public policy.

We will need global ethics beyond any single religion

AS IMPORTANT AS SCIENCE will be for our future, it alone cannot suffice to set public goals. We still need shared moral precepts for our society. For that, most Americans turn to their religion. But the message from religion can be as disturbing as it is uplifting. For each powerful admonition to "do unto others as you would have them do unto you" and "love your neighbor as you love yourself," there are also the invidious religious beliefs that only true believers in [fill in the blank] will find salvation. Religion divides, often violently, as well as it uplifts. Religion lies at the center of many, if not most, of today's wars.

It is my fear that we risk increasing explosions of mass violence unless we work much harder to find a new global ethic that transcends any single religious tradition. Science actually gives us a hand in that ethical challenge. Genetic evidence suggests very strongly that we are all Africans, common descendants of the small and hardy band of *Homo sapiens sapiens* who left Africa around seventy thousand years ago. Our genetic makeup is shared, as is our common human fate. We are all Africans, and we are all struggling to find meaning and happi-

ness in our lives and the lives of our children and children's children. From this shared fate also comes the powerful possibility of seeing a shared destiny and shared purpose. John F. Kennedy put it most beautifully of all when he observed in the wake of the world-threatening Cuban missile crisis, "For in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children's futures. And we are all mortal."

Mr. Cheney, stop panicking. There is enough to go around.

VICE-PRESIDENT CHENEY has led the rise of militarism in our country, largely because he views the world as a great bare-knuckle struggle for survival. For him, military control over the Middle East is the route to U. S. oil—and hence national—security. Mr. Cheney's ideas are based on a view of the world as an unceasing struggle for the scarce resources on which we depend, a vision that is indeed deeply ingrained in human nature, even a view that made sense for most of humanity's time on this planet.

When last year's famous antiwar poster asked, "How did our oil get under their sand?" the vice-president's answer seemed to be that it's really our sand, too. The war in Iraq aimed not only to topple Saddam but to ensure U. S. energy security for the next generation, and not just from Islamic extremists, but also from the Chinese and others who might forget that the U. S. insists on first claims on increasingly scarce global oil supplies. Yet the view is archaic and wrong. As a result of scientific and technological advances, there really is enough "stuff" to go around. We don't need a war to secure our energy resources; we just need to think much more clearly than we do today. Siblings fight for food even when the dinner table is overflowing, and grown-ups spend hundreds of billions of dollars on war even though there is enough on the planet to go around.

The fight over scarce resources was of course the driving force of human society for millennia, but the science-based technological breakthroughs of the past two hundred years offered another breakthrough, an escape from the natural struggle "red in tooth and claw." By harvesting the vast stores of energy via hydrocarbons, solar electricity, wind power, and hydroelectric power, we have been able to break out of the narrow constraints of survival. Ancient solar power, buried in petroleum and natural-gas deposits, now feeds the world when converted to fertilizer; current solar power, harvested in photovoltaic cells, can help fuel an information revolution in the villages of Africa and India. We are not running out of energy in the aggregate, even if it is true that petroleum might become scarce in the next few decades. Oil may become more scarce, but technologies already exist that will convert vast stocks of coal, tar sands, and oil shales into petroleum, or even into hydrogen and other energy carriers, in supplies that will last for centuries. But to use these alternatives safely and cheaply, there is considerable work to be done to improve these technologies and forge new environmental policies so that these energy sources could be used safely. Our government has barely even recognized the tasks ahead, much less begun the significant public investments that will be needed to achieve these goals.

In short, we are wasting hundreds of billions of dollars and thousands of lives trying to secure [continued on page 146]

A Simple Plan

[continued from page 129] Middle Eastern oil fields when a small fraction of that amount invested in alternative energy sources would provide longer lasting, cheaper, and cleaner energy for generations to come. Herein lies the cost of having a government that downplays and derides the power of scientific inquiry.

6) Though our natural bounty is vast, we are wrecking it nonetheless

For no good reason other than wanton carelessness and ignorance of science, we are on a crash course to undermine our climate, our oceans, our rain forests, our fellow species. We are willfully ignoring the evidence. Long-term climate change is real, and it is dangerous. We are already witnessing, most likely, the early signs of massive and unpredictable swings in the earth's climate system. Long-term droughts over parts of Africa, Europe's extraordinary heat wave last summer, massive droughts in the American southwest, and other extreme events may be just bad luck, or something more. What seems clear is that "once in a century" events are arriving much more frequently than once in a century. And recent evidence suggests that such changes augur massive species extinctions and huge risks for many food-growing regions of the world.

The situation is just as dramatic regarding the major ecosystems that sustain and enrich our lives—coral reefs, rain forests, ocean fisheries, mangroves, wetlands. In every dimension of the earth's biological environment, the bulging world population, combined with wanton disregard of man-made impacts, is leading to disarray. Yet once again, with a combination of prudence, science, and long-term investments in our future of small amounts of our income today, we could forestall or reverse many of these dire outcomes. If we set aside a few tens of billions of dollars per year—a fraction of the Iraq war costs or the tax cuts of recent years, and less than one percent of our annual income—we could develop new energy systems to capture and safely dispose of the carbon emissions that are changing the world's climate. We could preserve vital natural ecosystems—in the Amazon, the Congo rain forest, Southeast Asia—that not only help sustain our lives and livelihoods through global environmental processes but also carry the world's heritage of biodiversity, a heritage of inestimable and irreplaceable value.

7) We should demand much more from the super-rich

Our super-rich have pressed for tax cuts that they don't need and have run away from their international responsibilities. There are exceptions—like Bill Gates, George Soros, Gordon Moore—who have turned their vast wealth back into public service. But these great philanthropists are rare. The current arrangements, in which America's super-rich get

richer while the world's extreme poor die of their poverty, will no longer do. If the super-rich don't step up to the plate, they will end up the victims of a social explosion, within the U. S. and from the rest of the world.

The simplest step is to reverse President Bush's tax cuts. When "Upper West Side academics" such as I call for reversing the tax cuts, we are immediately accused of elitism, of not understanding how hard it is to make ends meet in America. But the tax cuts have dramatically worsened the prospects of the working class, not improved them. Lower- and middle-income households that supported the tax cuts have been had. President Bush told them that everybody would win via the tax cuts, though some (the rich) would get more than others (the working class and poor), simply because they pay more taxes. But this is sheer sophistry. While the tax cuts went overwhelmingly to the rich—nearly 50 percent of the tax cuts for the richest 5 percent of households—the resulting budget deficits will have to be paid for by all. If, as the White House proposes, those budget deficits are eventually plugged by spending cuts, the losses borne by the working class will overwhelm the meager tax savings they might have received. Only the richest 15 percent or so of taxpayers would benefit financially from the Bush tax cuts when the tax cuts are offset by broad-based spending cuts.

The fact of the matter is that the super-rich in the United States have walked away with the gold in recent years, and they will have to be the first to pay up—to close the budget deficit, help the world's poor, and invest in an ecologically sane and sound future. The working classes are right to be ticked off, but the Bush tax cuts simply dug them into an even deeper hole. The first step of recovery would be to reverse the Bush tax cuts for the top 20 percent of households, thereby recouping around 60 percent of the revenue reduction. We should go further. For the super-high-end taxpayers, we should institute a "save the world" surcharge, directed toward helping the world's poorest people. There are around 635,000 taxpayers with a taxable income above \$500,000 per year. These super-rich have a combined income of about \$1 trillion, an average of roughly \$1.5 million per taxpayer. If we collected just 5 percent of their income above \$500,000, the tally would be about \$35 billion per year for the group, or about what is needed in additional U. S. development aid to the world's poorest countries. How fitting that the world's richest people would share a small percentage of their vast incomes to help save millions of people each year from death in the world's poorest countries.

8) The U. S. is not the new Rome . . . and thank goodness

The neocons proclaimed the U. S. to be the new Rome. It's not a good precedent. Russia long ago imagined itself as the Third Rome (after the Roman Empire and Constantinople, seat of the Eastern Empire). If we persist in

such illusions, we'll eventually follow Russia in going right over the precipice. The U. S. has a strong economy and an overpowering military, but it has neither the means nor the will nor the reason to try to run the world. By 2050, the Chinese economy is likely to be larger than ours, and even India might catch up by then in total purchasing power. Barring a global disaster, the world's center of gravity will shift toward Asia, as these great countries close a technological gap that opened during the past two centuries.

The biggest mistake is to believe that U. S. dominance today is the result of some God-given favor guaranteed to keep the U. S. in the lead. The self-congratulatory view of America as the world's unique "shining city on the hill" is the political variant of creationism. In fact, U. S. economic preeminence has resulted from a vast and favorable territory, favorable political and economic institutions, the willingness to take in hardworking and creative immigrants from all over the world, and an early and sustained embrace of science and technology. But America's success can and will be replicated elsewhere, and the world will be better for it. Japan, a decidedly non-Western power, seized its opportunity in the nineteenth century. China has begun to surge from the late 1970s, and India is on the ascent today. In all these cases, the same commitment to education, science, and technology that propelled America is what propels these countries as well. The spread of prosperity is very good news for the world. Poverty is falling and incomes are rising, not at the expense of U. S. well-being, but by extending the benefits of science and technology to a widening portion of humanity. And with prosperity tends to come democracy and social stability as well.

9) If we lead, Washington will follow

Science and technology, mobilized by an ethic of shared responsibility, can fight disease and hunger, and forestall or mitigate long-term climate change. But we can do it only if we try. We are surely the first generation in human history that could actually bring about an end to extreme poverty on the planet. With prudence and long lead times, we could also invest in the R&D and new infrastructure to enjoy our prosperity, build flexibility into our energy systems, and manage our needs consistently with the growing global ecological challenges. In short, we are the lucky inheritors of the world's greatest surge of scientific and technological knowledge and of a world less divided by economic ideologies than ever before. Our new millennium opened with a vast panorama of all that we can accomplish. Yet we got off to an unusually bad start, not only because of September 11, but even more because of our disastrous response to that day. Yet there is still time to get this right. Across America, we have to set a new course, without waiting for Washington this time. Since our leaders won't lead, you and I and millions like us will have to take up the cause in their stead. ■