

Failing States

THE STAKES ARE HIGH,
THERE IS MOUNTING EVIDENCE THAT OUR
AND TIME IS NOT ON OUR SIDE.
CIVILIZATION IS IN

serious trouble

WE LIVE IN A TIME of great instability and social unrest. Our global civilization faces a number of environmentally destructive trends—all of our own making. In addition to widespread deforestation and soil erosion, we are confronted with aquifer depletion, crop-withering heat waves, collapsing fisheries, melting mountain glaciers and rising seas. As environmental and economic stresses intensify, the list of failing states lengthens. We can no longer ignore the consequences of our actions.

by
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ILLUSTRATION BY NICOLA SAMORI



MANY EARLIER CIVILIZATIONS were undone by environmentally induced crises. Typically, they faced one or two destructive environmental trends, most often deforestation and soil erosion. The Sumerian civilization of the fourth millennium B.C. was remarkable for its irrigation system, which supported a highly productive agriculture. Yet an environmental flaw in the system design brought the civilization down. Water from behind dams was diverted onto the land, raising crop yields. Some of the water was used by the crops, some evaporated into the atmosphere and some percolated downward. Over time, this percolation raised the water table. As the water climbed near the surface, it began to evaporate, leaving the mineral salts behind. The accumulation of salt in turn reduced the productivity of the land. The Sumerians shifted to barley, a more salt-tolerant plant. But eventually barley yields also declined. The resultant shrinkage of the food supply undermined the economic foundation of this great civilization.

We environmentalists have been saying for decades that we want to save the planet, but the planet is likely to be around for some time. It is civilization we need to save. As more states fail, we face a disturbing question: How many failing states before we have a failing global civilization?

The term *failing state* has been in use for only a decade or two, but these countries are now a prominent feature of the international political landscape. After a half century of states forming from former colonies and from the breakup of the Soviet Union, the world is now faced with the opposite situation: the disintegration of states. As an article in *Foreign Policy* observes, "Failed states have made a remarkable odyssey from the periphery to the very center of global politics."

In the past, governments worried about the concentration of too much power in one state. But today, failing states pose the greatest threat to global order and stability. As *Foreign Policy* notes, "World leaders once worried about who was amassing power; now they worry about the absence of it." Or, as *The Economist* notes, "Like a severely disturbed individual, a failed state is a danger not just to itself but to those around it and beyond."

The Central Intelligence Agency funds the Political Instability Task Force to track political risk factors. The British government's international development arm has identified 46 "fragile states." The World Bank focuses its attention

on some 30 low-income "fragile and conflict-affected countries." But the most systematic effort to analyze countries according to their vulnerability to failure is one undertaken annually by the Washington, D.C.-based Fund for Peace and published each year in the July/August issue of *Foreign Policy*. This invaluable assessment not only offers insights into changes under way in the world but also tells us where we are heading.

The Fund for Peace's research team analyzes data for 177 countries and ranks them according to "their vulnerability to violent internal conflict and societal deterioration." Somalia is at the top of the 2010 Failed States Index, followed by Chad, Sudan, Zimbabwe and the Democratic Republic of the Congo. Three key oil-exporting countries are among the top 20: Sudan, Iraq and Nigeria. Pakistan, now ranked number 10, is the only failing state with a nuclear arsenal, but North Korea—19th on the list—is developing a nuclear capability

What is a failed state? It is a country whose government has lost control of its territory. The governmental function

A World of Woe

Environmental degradation contributes to political instability and leads to social collapse. Here are six reasons for concern

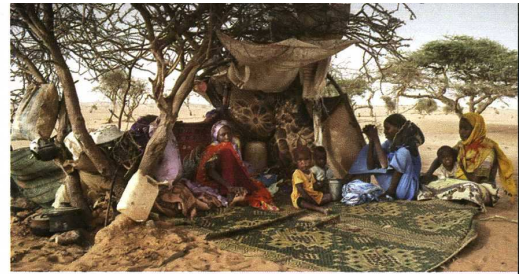
A India's Gangotri glacier, which helps keep the Ganges flowing during the dry season, is retreating. If this melting continues to accelerate, the Gangotri's life expectancy will be measured in decades, and the Ganges will eventually flow only during the rainy season. For the 407 million Indians and Bangladeshis who live in the Ganges basin, this could be a life-threatening loss of water. **B** Chinese glaciologist Yao Tandong predicts that two thirds of China's glaciers could be gone by 2060. "The full-scale glacier shrinkage in the plateau region," Yao says, "will eventually lead to an ecological catastrophe." **C** Tanzania's snowcapped Kilimanjaro may soon be free of snow and ice. Africa's tallest mountain lost 85 percent of its ice mass between 1912 and 2007. The glaciers on Kilimanjaro may soon be relegated to photographs in museums. Not far away, Mount Kenya has lost seven of its 18 glaciers. Local rivers fed by these glaciers are becoming seasonal

waterways, generating conflict among the 2 million people who depend on them for water during the dry season. **D** Peru stretches some 1,000 miles along the Andes and is home to 70 percent of the earth's tropical glaciers. Some 22 percent of its glacial endowment, which supplies water to the cities in the coastal regions, has disappeared. The Quelccaya glacier in southern Peru, which was retreating by 20 feet a year in the 1960s, is now retreating by 200 feet annually. **E** Two deserts in north-central China are expanding and merging to form a single desert that overlaps Inner Mongolia and Gansu provinces. To the west, in Xinjiang province, two even larger deserts—the Taklimakan and the Kumtag—are also merging. Highways running through the shrinking area between them are regularly inundated by sand dunes. **F** The Bodélé Depression in Chad is the source of an estimated 1.3 billion tons of wind-borne soil a year, up tenfold since measurements began in 1947.

breaks down and in some cases even disappears. Such states cannot protect their citizens.

The most conspicuous indication of state failure is a breakdown in law and order and the related loss of personal security. When governments lose their monopoly on power, the rule of law begins to disintegrate. Civil wars break out as opposing groups vie for power. At this point, governments often turn to the United Nations for help. In fact, UN peacekeeping forces are assisting roughly a third of the top 20 failing states, including Haiti, Sudan and the Democratic Republic of the Congo. The number of security personnel in peacekeeping missions doubled between 2003 and 2010.

In Haiti, armed gangs ruled the streets until a UN peacekeeping force arrived in



BIG TROUBLE
 From shrinking snowcaps on Mount Kilimanjaro to Sudanese refugees in Chad to Hisbul Islam militiamen in Somalia, the world now faces a variety of crises brought on by the neglect of our environment.



2004. In Afghanistan, local warlords and the Taliban, not the central government, control most of the country outside of Kabul.

Environmental stress is an underlying pressure. Weaker nations find themselves unable to cope with food and water shortages. Food becomes the weak link in our 21st century civilization.

Failed states can't provide food security. This isn't necessarily because governments have become less competent but because it has become more difficult to obtain enough food. World grain prices have been roughly double their historical levels since early 2007. The UN world food price index reached an all-time high in February 2011 after climbing for seven consecutive months. For low-income food-deficit countries, finding enough food is a challenge. And to make matters worse, temperatures are rising as atmospheric levels of carbon dioxide rise. For each one-degree-Celsius rise in temperature during the growing season, farmers can expect a 10 percent decline in grain yields.

With food security, as with personal security, the United Nations is a fallback. The food equivalent of the peacekeeping forces is the World Food Programme, a UN agency that provides emergency food aid in more than 70 countries. Some countries, such as Haiti, depend on a UN peacekeeping force to maintain law and order and on the WFP for part of its food. Haiti is, in effect, a ward of the United Nations.

Failing states are rarely isolated phenomena. Conflicts can easily spread to neighboring countries, as when the genocide in Rwanda spilled over into the Democratic Republic of the Congo, where an ongoing civil conflict claimed more than 5 million lives between 1998 and 2007. The vast majority of the deaths in the DRC were due to war's indirect effects, including hunger, dysentery and respiratory illnesses. Similarly, the killings in Sudan's Darfur region quickly spread into Chad as victims fled across the border.

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HOW TO

Save Civilization

No one can argue that we lack the resources to rescue civilization. The scale and urgency of the changes we must make can seem overwhelming, but consider what the U.S. did during World War II. In his State of the Union address on January 6, 1942—one month after the bombing of Pearl Harbor—President Franklin D. Roosevelt called for the manufacture of 45,000 tanks, 60,000 planes and several thousand ships. "Let no man say it cannot be done," FDR said. He realized that the world's largest concentration of industrial power was in the U.S. automobile industry, which—even during the Depression—produced 3 million or more cars a year. The auto industry expected to continue making cars and simply add on the production of armaments. But

Roosevelt banned the sale of new cars. From early February 1942 through the end of 1944, essentially no cars were produced in the United States. Residential and highway construction were also halted, and driving for pleasure was banned. Strategic goods—including tires, gasoline, fuel oil and sugar—were rationed beginning in 1942. Yet that year witnessed the greatest expansion of industrial output in the nation's history—all of it for military use. From the beginning of 1942 through 1944, the nation turned out 229,600 aircraft—a fleet of bombers, fighters, troop transports, cargo transports and reconnaissance planes so vast it is hard to comprehend. It did not take decades to restructure the U.S. industrial economy. It did not take years. It was done in a matter of months.

1

Cut carbon dioxide emissions 80 percent by 2020 / We have to improve energy efficiency while we restructure our transportation systems. This should offset projected growth in energy use between now and 2020. We must cut CO₂ emissions by boosting energy efficiency and replacing fossil fuels with renewable energy, principally wind, solar and geothermal. This is best done by restructuring taxes—lowering income taxes and raising the tax on carbon. We must also end deforestation while engaging in a campaign to plant trees and stabilize soils. This proposed reduction in carbon-dioxide emissions should bring the rise in atmospheric CO₂ concentrations (currently at 387 parts per million) to an end by 2020 (at 400 parts per million). From there we can begin to reduce CO₂ concentrations to the desired 350 parts per million.

2

Eradicate poverty / The late 20th century's decline in hunger and malnourishment was reversed when the number of hungry people rose from 788 million in 1996 to 833 million in 2001. In 2011 it is around 1 billion and climbing. Investments in education, health, family planning and school lunches are a humanitarian response to the plight of the world's poorest countries. But they are also an investment in our future. For the first time in history we have the technological and financial resources to eradicate poverty.

3

Cap world population at 8 billion / Slowing world population growth means ensuring that all women who want to plan their families can do so. Unfortunately this is currently not the case for 215 million women, 59 percent of whom live in sub-Saharan Africa and the Indian subcontinent. Education is also essential. As female education rises, family size declines.

4

Restore natural systems / No civilization has survived the ongoing destruction of its natural support systems. We must reforest the earth, protect topsoil, restore rangelands and fisheries, stabilize water tables and protect biological diversity. We can end net deforestation worldwide and sequester carbon through tree-planting initiatives and by adopting improved land-management practices. Although banning deforestation may seem far-fetched, Thailand, the Philippines and China have implemented bans on logging. The only viable way to eliminate overgrazing on the two fifths of the earth's land surface classified as rangelands is to reduce the number of cattle, sheep and goats. Oceanic fisheries are also under intense pressure. For decades governments have tried to restrict the catch of individual species. Sometimes this worked; sometimes it failed. In recent years, support for the creation of marine reserves has gained momentum. Such reserves, where fishing is banned, help repopulate surrounding areas.

5

Redefine security / We have inherited a definition of security from the 20th century, which was dominated by two world wars and a cold war. This definition sees national security almost exclusively in military terms. But if we were to start with a clean pad of paper and list the leading threats to our civilization today, the list would include climate change, population growth, spreading water shortages, rising food prices and a growing number of failing states. Armed aggression, the traditional threat, does not even make the top five in this list.

In response to these new threats we need to redefine security, not just in an intellectual sense but also in a fiscal sense. In responding to the threats to our future described above, we rely on tax changes to restructure the energy economy and dramatically cut carbon emissions. Eradicating poverty, stabilizing population and restoring the economy's natural support systems will require additional fiscal outlays. All together these initiatives will require an additional \$200 billion per year above current expenditures, a shift of \$200 billion from the defense budget to the new security budget. This seems like a lot, and it is. But it is less than a third of the U.S. military budget and less than an eighth of the global military budget. We can no longer say we don't have the resources to save civilization.

We have calculated the cost of the changes needed to move our civilization off the decline-and-collapse path and onto a path that will sustain us. What we cannot calculate is the cost of doing nothing. How do you put a price on social collapse and the massive die-off it will inevitably bring? —L.R.B.

Failed States

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Failing states such as Afghanistan and Myanmar have become sources of illegal drugs. In 2009 Afghanistan supplied 89 percent of the world's opium, much of it made into heroin. Myanmar, though a distant second, is a major heroin supplier for China.

The conditions of state failure may be a long time in the making, but the collapse itself can come quickly. Yemen, for example, is facing several threatening trends. It is running out of both oil and water. The underground basin that supplies the capital city of Sanaa with water may be fully depleted by 2015. Oil production, which accounts for 75 percent of government revenue and an even larger share of export earnings, fell by nearly 40 percent from 2003 to 2009. And with the country's two main oil fields seriously depleted, there is nothing in sight to reverse the decline.

Underlying these stresses is a fast-growing, poverty-stricken population, one of the poorest among the Arab countries. On the political front, the shaky Yemeni government faces a Shiite insurgency in the north and a deepening of the long-standing conflict between the north and the south. As the Arab Spring spread to Yemen, efforts to oust President Ali Abdullah Saleh had the country on the brink of civil war as of mid-2011. With its long, porous border with Saudi Arabia, Yemen could become a staging ground and gateway for Al Qaeda to move into Saudi Arabia. Could the ultimate Al Qaeda goal of controlling Saudi Arabia, both a center of Islam and the world's leading exporter of oil, finally be within reach?

Ranking on the Failed States Index is closely linked with demographic indicators. The populations in 15 of the top 20 failing states are growing between two percent and four percent a year. Niger tops this list at 3.9 percent, and Afghanistan's population is growing by 3.4 percent. Yemen is 2.9 percent. A population growing at three percent a year may not sound overwhelming, but it will expand 20-fold in a century. In failing states, big families are the norm, not the exception, with women in a number of countries bearing an average of six or more children.

In 14 of the top 20 failing states at least 40 percent of the population is under the age of 15, a demographic indicator that raises the likelihood of political instability. Young men lacking employment opportunities often become disaffected and ready recruits for insurgencies.

In many countries with several decades of rapid population growth, governments suffer from demographic fatigue and are unable to cope with the steady shrinkage in cropland and freshwater supply per person. They cannot build schools fast enough to educate the swelling ranks of children.

Sudan is a classic case of a country caught in the demographic trap. Like many failing states, it has developed far enough economically and socially to reduce mortality but not far enough to lower fertility. As a result, large families beget poverty and poverty begets large families. Women in Sudan have on average four children, double the number needed for replacement. This expands the population of 42 million by 2,000 a day. Under this pressure, Sudan—like other countries in similar situations—is breaking down.

All but four of the 20 countries that lead the list of failing states are caught in this demographic trap. Realistically, they probably cannot break out of it on their own. They will need outside help to raise education levels, especially of girls. In every society for which we have data, the more education women have, the smaller their families. And the smaller the families, the easier it is to break out of poverty.

Failed states are losing the race between food production and population growth. Even getting food relief to failing states can be a challenge. In Somalia, threats from Al Shabaab, an Al Qaeda-affiliated radical group, and the killing of food relief workers effectively ended efforts to provide food assistance in the southern part of the hunger-stricken country.

Another characteristic of failing states is the deterioration of the economic infrastructure—roads, power, water and sewage systems. For example, a lack of maintenance has left many irrigation canal networks in an advanced state of disrepair, often no longer able to deliver water to farmers.

Virtually all the top 20 countries are depleting their natural assets—forests, grasslands, soils and aquifers—to sustain their rapidly growing populations. The three countries at the top of the list—Somalia, Chad and Sudan—are losing topsoil to wind erosion, thus undermining the productivity of their land. Several countries, including Afghanistan, Iraq, Pakistan and Yemen, are water-stressed and are overpumping their aquifers.

After a point, as rapid population growth, deteriorating environmental support systems and poverty reinforce one another, the resulting instability makes it difficult to attract investment from abroad. A drying up of foreign investment and an associated rise in unemployment are also part of the decline syndrome.

In an age of increasing globalization, a functioning global society depends on a cooperative network of stable nation-states. When governments lose their capacity to govern, they can no longer collect taxes, much less be responsible for their international debts. More failing states mean more bad debt. Efforts to control international terrorism also depend on cooperation among functioning nation-states. As more states fail, such cooperation becomes less effective.

Failing states may lack health care systems sophisticated enough to participate in international efforts to control the spread of infectious diseases, such as polio, avian flu, swine flu and mad cow disease. In 1988 the international community launched an effort to eradicate polio, a campaign patterned on the one that eliminated smallpox. The goal was to eliminate the disease that used to paralyze an average of 1,000 children each day. By 2003 polio had been eradicated in all but a few countries, among them Afghanistan, India, Nigeria and Pakistan.

But that year mullahs in northern Nigeria, now 14th on the failing-states list, began to oppose the vaccination program, claiming it was a plot to spread AIDS and sterility. As a result, the local vaccination effort broke down, and polio cases in Nigeria tripled over the next three years. Meanwhile, Nigerian Muslims making their annual pilgrimage to Mecca may have spread the disease, reintroducing the virus in some Muslim countries that had been polio-free—such as Indonesia, Chad and Somalia. In response, Saudi

officials imposed a polio vaccination requirement on all younger visitors from countries with reported cases of polio.

In early 2007, when eradication again appeared to be in sight, violent opposition to vaccinations arose in Pakistan's North-west Frontier Province, where a doctor and a health worker in the Polio Eradication Program were killed. More recently, the Taliban has refused to let health officials administer polio vaccinations in the Swat Valley, further delaying the campaign. This raises a troubling question: In a world of failing states, is the goal of eradicating polio, once so close at hand, now slipping beyond our reach?

So far, failing states have been mostly smaller ones. But some countries with more than 100 million people, such as Pakistan and Nigeria, are working their way up the list. So is Mexico, where both oil production and exports have peaked, lowering the government's tax revenue and foreign exchange. Beyond this, a criminal organization called the Zetas taps government oil pipelines in areas it controls. In 2008 and 2009, the Zetas withdrew more than \$1 billion worth of oil. The government's war with the drug cartels has claimed more than 34,600 lives since 2006, a number that dwarfs American lives lost in Iraq and Afghanistan in the past decade. With income from oil and tourism shrinking—and with foreign investors becoming nervous—the Mexican government is being seriously challenged.

For India, where 15 percent of the people are being fed with grain produced by over-pumping of groundwater, emerging water shortages could trigger its decline. As local conflicts over water multiply and intensify, tensions between Hindus and Muslims could reignite, leading to instability.

Fortunately, state failure is not always a one-way street. South Africa, which could

have erupted into a race war a generation ago, is now a functioning democracy. Liberia and Colombia, both of which once had high Failed States Index scores, have made remarkable turnarounds.

Nevertheless, as the number of failing states grows, it becomes more difficult to deal with various international crises. Situations that may be manageable in a healthy world order—such as maintaining monetary stability or controlling the outbreak of an infectious disease—become difficult and sometimes impossible in a world with many disintegrating states. Even maintaining international flow of raw materials could become a challenge. At some point, spreading political instability could disrupt global economic progress, which underscores the need to address the causes of state failure with a heightened sense of urgency.

The world is moving into uncharted territory as human demands override the sustainable yield of natural systems. The risk is that people will lose confidence in the capacity of their governments to cope with such problems, leading to social breakdown. The shift to anarchy is already evident in Somalia, Afghanistan and the DRC.

How can we save civilization? We need an economy in sync with the earth and its natural support systems, not one that destroys them. The fossil-fuel-based, automobile-centered throwaway economy that evolved in Western industrial societies is no longer a viable model—not for the countries that shaped it or for the countries that emulate them. In short, we need to build a new economy, one powered with carbon-free sources of energy—wind, solar and geothermal—one that has a diversified transport system and that reuses and recycles everything.

We cannot afford to do otherwise.

