

GLOBAL POVERTY, WEAK STATES AND INSECURITY

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EXECUTIVE SUMMARY:

The world's weakest states are poor states that lack the capacity to fulfill essential government functions, chiefly: 1) to secure their population from violent conflict; 2) to competently meet the basic human needs of their population (i.e. food, health, education), and; 3) to govern legitimately with the acceptance of a majority of their population. The Brookings-CGD project defines weak states as poor states that suffer from significant "gaps" in security, performance and legitimacy. We classify states as "weak" if they meet the "low income" standard and exhibit "gaps" in at least two of the three fundamental government functions. This paper identifies fifty-two weak states in the world, and expounds on the multifaceted reasons this weakness poses a global security challenge. These states are high-risk zones that in a rapidly globalizing world may eventually, often indirectly, pose significant risks to far-away countries. Transnational "spillover" from these states includes conflict, terrorism, disease, and environmental degradation. Efforts to illuminate the complex relationship between poverty and insecurity may be unwelcome to those who want assurance that global poverty and U.S. national security are unrelated. However, we ignore or obscure the implications of global poverty for global security at our peril.

Few American leaders today evince much interest in poverty – either domestic or international. There are occasional exceptions: former Vice Presidential nominee John Edwards has made combating poverty a central theme of his recent public works. Bill Clinton, through his Global Initiative, emphasizes poverty alleviation as a pillar of his post-Presidential legacy. Senator Barack Obama intones faith as he speaks about our moral obligations to our fellow man and woman. Senator Sam Brownback stresses the importance of work and marriage as antidotes to U.S. poverty, and decries disease and genocide as he laments "suffering" in Africa. Yet, contrast our current obsession with flag-burning, the estate tax, immigration or gay marriage with the animating themes of the 1960s. Then, John and Robert Kennedy, Lyndon Johnson, Martin Luther King Jr. and many others summoned our national energy to wage "The War on Poverty" and build a "Great Society." Our media brought us searing images of destitution from Appalachia to the Mississippi Delta to the South Bronx. Our president insisted in global fora that: "Political sovereignty is but a mockery without the means of meeting poverty and illiteracy and disease. Self-determination is but a slogan if the future holds no hope."¹

With domestic poverty less visible but no less real and global poverty dismissed by many as the inevitable fate of the black, brown and yellow wretched of the earth, the majority of Americans seem, variously, tired, ignorant of, or indifferent to a scourge that kills millions across our planet every year. Yet, in Britain, Labor and Conservative party leaders compete on the basis of their commitment to fight global poverty. Public awareness of this issue in Britain would confound most Americans. Perhaps Britons have been so relentlessly bombarded by Bono, Bob Geldof, the BBC, Gordon Brown and Tony Blair that many have come to recognize the linkages between their own security and prosperity and that of peoples in remote corners of the planet. Americans do not yet, and it's past time that they should.

POVERTY AND INSECURITY

Grinding poverty is the lot of half of the world's population. Three billion human beings subsist on less than \$2 per day -- \$730 per year -- the equivalent of seven pairs of quality sneakers in the United States. In the developing world, poverty is not just a sentence to misery; it can often be a sentence to death. Hunger, malnutrition and easily preventable diseases like diarrhea, respiratory infections, malaria and cholera thrive in fetid slums that have no basic sewerage, clean water or electricity, while desolate rural areas lack basic health infrastructure to provide pre-natal care or life-saving vaccines. According to UNICEF, 10.5 million children under 5 years old die each year from preventable illnesses -- 30,000 each day -- ten times the number who perished in the attacks of September 11, 2001. The vast majority of these children succumb, in effect, to poverty. Children living in the poorest 20% of households are two to three times more likely to die than those living in the richest 20% in the same countries.²

Basic intuition suggests that such pervasive poverty and grotesque disparities breed resentment, hostility and insecurity. Nevertheless, a significant amount of punditry and even academic effort has been devoted to discrediting the notion that poverty has any security consequence for Americans.³ The most frequently invoked canards draw on over-simplified

¹ John F. Kennedy, Speech to the U.N., September 25, 1961.

² UNICEF, State of the World's Children 2006: Excluded and Invisible, pp. 19-20.

³ Among the pundits, see for instance Daniel Pipes, "It's Not the Economy, Stupid: What the West Needs to Know About the Rise of Radical Islam," *Washington Post*, July 2, 1995. Among academics, see Alan Krueger and Jitka Maleckova, "Education, Poverty and Terrorism: Is There a Causal Connection?", *Journal of Economic Perspectives*, 17, 4, Fall 2002; and, James Piazza, "Poverty, Political Freedom and the Roots of Terrorism," *American Economic Review*, 96, 2, May 2006.

truisms, such as: poverty doesn't cause terrorism, since the 9/11 hijackers were mainly middle class, educated Saudis; if poor people were prone to be terrorists, then Africa not the Middle East would be the hot bed of terrorism; and poor people are too busy just trying to survive to do anyone harm. All of these statements are superficial and flawed, but assume for a moment they are true. Assume that an individual's economic impoverishment has nothing to do with his or her decisions about whether or not to engage in acts of violence. Would that be a rational basis for concluding that global poverty has no security significance to the U.S.? Some would have us believe so, but they would be mistaken.

For even if poverty at the individual level were of no security significance to the U.S. and other developed countries (dubious though that proposition is), poverty is highly significant at the country level.⁴ Poor states typically fail to meet the basic needs of many of their citizens -- for food, clean water, health care or education. Where human needs are great and service gaps persist, people tend to accept help from almost anyone willing to provide it. Sometimes, help comes from multilateral or bilateral aid agencies. Sometimes from secular NGOs. But, in Africa and South Asia, food, clothing, schools and health care are often provided by foreign-funded religious NGOs, Christian missionaries or mosques -- sometimes with theological, even extremist, strings attached. These same poor states that cannot fulfill their core responsibilities to provide security or sustenance to their own people may also fail to exercise effective sovereign control over their territory. Poor states often lack the legal, police, intelligence or security sector capacity to control their borders and remote areas and to prevent plundering of their natural resources.

Poor states can be high-risk zones that in a rapidly globalizing world may eventually, often indirectly, pose significant risks to far-away countries. How? People, goods, funds and information now traverse the planet with lightning speed. More than two million travelers cross an international border each day. Between 1950 and 2003, air traffic volume grew from twenty-eight billion passenger-kilometers flown to 2.99 trillion passenger-kilometers.⁵ Over the past four decades, total seaborne trade is estimated to have more than quadrupled.⁶ These factors combine to increase Americans' exposure to distant phenomena – transnational security threats that can arise from and spread to anywhere on the planet.

These threats could take various forms: a mutated avian flu virus that jumps from poultry to humans in Cambodia or Burkina Faso; a U.S. expatriate who unwittingly contracts Marburg virus in Angola and returns to Houston on an oil company charter; a terrorist cell that attacks a U.S. navy vessel in Yemen or Somalia; the theft of biological or nuclear materials from poorly secured facilities in the former Soviet Union; narcotics traffickers in Tajikistan and criminal syndicates from Nigeria; or, over the longer term, flooding and other effects of global warming exacerbated by extensive deforestation in the Amazon and Congo River basins. Weak states such as these can function passively as potential incubators or

⁴ Parts of this paper have been adapted from "Strengthening Weak States: A 21st Century Imperative" by Susan E. Rice, in *Power and Superpower: Global Leadership in the 21st Century*, to be published by the Security and Peace Initiative and The Century Foundation in the fall of 2006. See also: Susan Rice, "The Threat of Global Poverty," *The National Interest*, 83 (Spring 2006).

⁵ International Civil Aviation Organization, *ICAO Statistics*, available online at: <u>www.icao.int</u>.

⁶ International Maritime Organization, "Background Paper: International Shipping - Carrier of World Trade," available online at:

http://www.imo.org/includes/blastDataOnly.asp/data_id%3D13168/backgroundpaper (E).PDF.

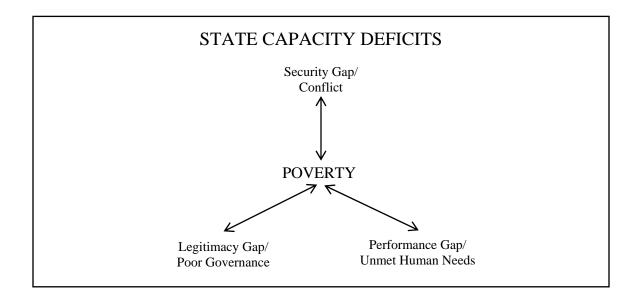
conveyor belts for transnational threats. Dangerous spillovers from weak states could result in major damage to the U.S. economy. In a worst case scenario, such as a deadly pandemic, they could result in the loss of hundreds of thousands—if not millions—of American lives.

WHICH STATES ARE WEAK AND WHY?

The world's weakest states are poor states that lack the capacity to fulfill essential government functions, chiefly: 1) to secure their population from violent conflict; 2) to competently meet the basic human needs of their population (i.e. food, health, education), and; 3) to govern legitimately with the acceptance of a majority of their population. Descriptions of the universe of weak states vary. The British Department for International Development, the Fund for Peace, the World Bank and others have defined substantially overlapping but differing sets of "weak", "fragile", "failing", or "low-income... under stress" states. In some instances, the countries are not listed publicly or the rationale for their inclusion is left unstated to avoid political controversy.

This year, the Brookings Institution and Center for Global Development initiated a collaborative project called the "Weak States Threat Matrix," led by Susan Rice and Stewart Patrick. We have begun by identifying the world's weakest states based on clear-cut and transparent criteria and will subsequently assess the nature and significance of the transnational security threats that can or do emanate from each of these countries. Our purpose is to provide policy makers with an analytical basis for differentiating among the large number of weak states and for prioritizing the allocation of scarce attention and resources.

The drivers of state weakness vary enormously from state to state. Poverty fundamentally erodes state capacity — by fueling conflict, sapping human capital, hollowing out or impeding the development of effective state institutions, and by creating especially conducive environments for corrupt governance. While poverty underlies state weakness, weakness is also a consequence, variously, of lack of legitimacy, lack of competence to perform adequately in delivering essential services to the population, as well as of conflict and instability. Each of these capacity deficits can, in turn, exacerbate poverty.

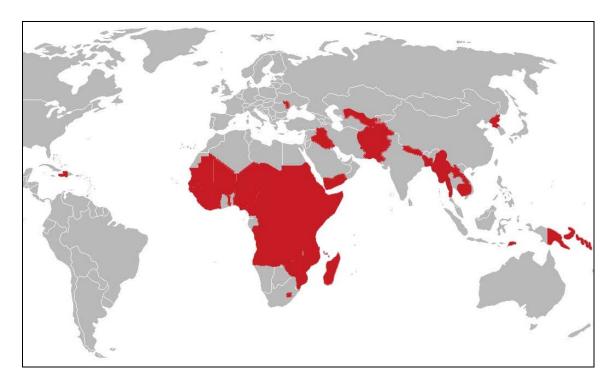


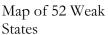
The Brookings-CGD project defines weak states as poor states that suffer from significant "gaps" in security, performance and legitimacy.⁷ We classify states as "weak" if they meet the "low income" standard and exhibit "gaps" in at least two of the three fundamental government functions. States that are classified as "lower middle income" are considered weak if they are deficient in all three functions.⁸

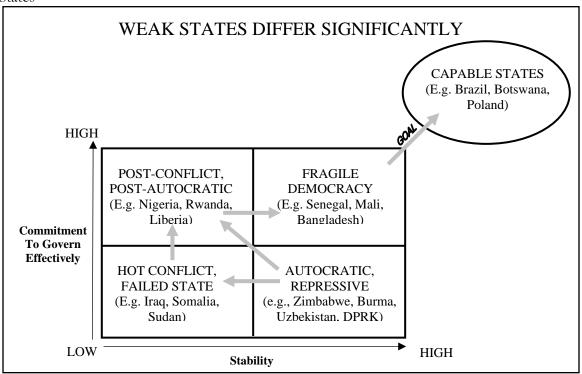
By this comparatively restrictive definition, we have initially identified fifty-two weak states in the world. The preponderance is found in Africa, Central Asia and South Asia. They include: Afghanistan; Angola; Bangladesh; Burkina Faso; Burundi; Cambodia; Cameroon; Central African Republic; Chad; Comoros; D.R. of Congo.; the Republic of Congo; Côte d'Ivoire; Djibouti; Eritrea; Ethiopia; Guinea; Guinea-Bissau; Haiti; Iraq; Kenya; Laos; Lesotho; Liberia; Madagascar; Malawi; Mali; Mauritania; Moldova; Mozambique; Myanmar; Nepal; Niger; Nigeria; North Korea; Pakistan; Papua New Guinea; Rwanda; Senegal; Sierra Leone; Solomon Islands; Somalia; Sudan; Tajikistan; Tanzania; Timor-Leste; Togo; Uganda; Uzbekistan; Yemen; Zambia; Zimbabwe.

⁷ Poor states are identified as those that, in 2005, the World Bank classified as "low income" with per capital gross national income (GNI) of \$875 or less, using the Atlas method. The next tier consists of "lower middle income" states with GNI per capita of between \$876 and \$3,465. The widely-respected Uppsala Conflict Database Project is utilized to determine the existence of a "security gap," as evidenced by armed conflict that results in at least twenty-five battle-related deaths a year at any point since 1990. The "performance gap" is proxied by the latest U.N. Human Development Index (HDI) list of countries described as having "low human development." The HDI measures a government's capacity to meet the needs of its citizens in such categories as health, education, and basic standard of living. The "legitimacy gap" is defined by the 2005 World Bank Institute's Governance Matters IV database rating of governance gap."

⁸ Iraq is one "lower middle income" state, which is currently a hot conflict zone but for which complete upto-date, independent data in every category is unavailable. Based on available information, we have categorized Iraq as "weak."







There is a second tier of fragile states -- those that are less impoverished than the weakest or slightly more capable of effective governance. While they are not included on the list of 52 states, they nonetheless warrant close scrutiny, because they may still serve as significant

breeding grounds for transnational security threats.⁹ Among these are Colombia, Egypt, Indonesia, Iran, Kyrgyzstan, India and Vietnam.¹⁰

Weak states can be classified into four categories: autocracies; conflict countries; countries transitioning from conflict or autocracy; and fragile, young democracies that appear on a path to sustainable security, if not yet broad-based development. These classifications are admittedly fluid, and some states may not fall squarely into any single category but rather straddle the grey areas between or among them. Nonetheless, the

objective of U.S. and international policy (as illustrated above) should be to help weak states move from conflict and autocracy, through post-conflict or post-autocratic transitional periods, to the more stable stage of fragile, functioning democracy.

The ultimate policy goal should be to build the ranks of capable states – like Brazil, Chile, Romania, Poland, Thailand, Botswana and Mauritius – that attain at least middleincome status, consolidate democracy and achieve lasting peace (for at least a generation), while contributing constructively to the international system.

TRANSNATIONAL "SPILLOVERS" FROM WEAK STATES

Weak states hobbled by poverty and, often, by poor governance pose the most immediate and deadly risks to their own citizens. These dangers can include violence, corruption, and governmental neglect or abuse. Yet, in a globalizing world that must contend increasingly with transnational security threats even more often than state-based threats, the consequences of state weakness can and do spill over borders into neighboring countries and even to far-flung regions of the world.

<u>Conflict</u>

Among the most significant consequences of country-level poverty is heightened risk of conflict. Poor countries are much more likely than rich countries to experience civil war. The average GDP per capita of countries afflicted by civil war is less than half that of countries with no conflict.¹¹ A wide range of empirical research finds that per capita GDP has an important, statistically significant relationship to the likelihood of civil war outbreak.¹²

⁹ These fragile states are one "gap" short of meeting the weak state criteria and are specifically defined as low income states with only one "gap" and lower middle income states with two "gaps."

¹⁰ Colombia, Egypt, Indonesia, and Iran are representative of lower middle income states with two gaps. Kyrgyzstan, India, and Vietnam are representative of low income states with only one gap.

¹¹Nicholas Sambanis, "Poverty and the Organization of Political Violence: A Review and Some Conjectures," Brookings Institution Trade Forum paper, April 2004. The dataset used for this analysis covers the period 1960-1999.

¹² Two of the most widely-cited studies that established this finding are Paul Collier and Anke Hoeffler, "Greed and Grievance in Civil War," *Oxford Economic Papers*, 56, 2004, pp. 563-595 and James D. Fearon, and David D. Laitin, "Ethnicity, Insurgency, and Civil War," *American Political Science Review*, 97, 1, 2003, pp. 75-90.

The link between poverty and conflict is a rare area of emerging scholarly consensus and probably the most robust finding in the econometric literature on conflict.¹³

Put simply, increasing a country's GDP -- without changing other important factors such as the degree of democratization or number of ethnic groups -- reduces the chance of civil war in that country. An otherwise "average" country with \$250 GDP per capita has a 15% risk of experiencing a civil war in the next five years, whereas for a country with per capita GDP of \$5,000, the risk of civil war drops to less than 1% over the same period.¹⁴ Other poverty-related conflict risk factors include shrinking economic growth, low levels of education, and high child mortality rates.

The case of Sierra Leone is illustrative. Just before civil war broke out there in March 1991, economic growth was negative and real GDP per capita had dropped more than 35% from 1970s levels.¹⁵ Sierra Leone in 1990 ranked last on the U.N. Human Development Index. Youth unemployment had soared and the education system, once among the best in the region, had collapsed with the economic decline of the 1980s. Lacking opportunities to pursue responsible employment, disaffected youth were more easily drawn to rebel activity as a means of gaining power and income looted from civilians and the country's rich alluvial diamond fields.¹⁶

When conflict breaks out, poverty can help perpetuate the fighting, and once a conflict has ended, poverty may also increase the likelihood that it will recur.¹⁷ The recent resumption of violence in East Timor, which displaced an estimated 150,000, underscores this risk. Many experts lauded East Timor as reliably on the path to lasting peace, but they failed to weigh the security consequences of its persistent poverty. Seven years into the post-conflict period, poverty has jumped since the departure of the large UN presence four years ago, which artificially boosted economic activity. Despite substantial international aid inflows, relatively little was devoted to improving basic health services or stimulating job-

bin/texis/vtx/publ/opendoc.htm?tbl=RSDCOI&id=3ae6a6b624&page=publ.

¹³ See Macartan Humphreys and Ashutosh Varshney, "Violent Conflict and the Millennium Development Goals: Diagnosis and Recommendations," Paper prepared for the meeting of the Millennium Development Goals Poverty Task Force Workshop, Bangkok June 2004; Nicholas Sambanis, "Poverty and the Organization of Political Violence: A Review and Some Conjectures." Brookings Institution Trade Forum, 2004; and, Nicholas Sambanis, "What is Civil War? Conceptual and Empirical Complexities of an Operational Definition," *Journal of Conflict Resolution*, 48, 6, 2004: 814-858.

¹⁴ These figures were estimated in an unpublished piece by Macartan Humphreys "Economics and Violent Conflict," Harvard University mimeo., 2003, using data found in from Paul Collier and Anke Hoeffler, "On the Incidence of Civil War in Africa," *Journal of Conflict Resolution*, 46, 1, 2002: 13-28. The figures are frequently cited by DFID and are found in the British Prime Minister's Strategy Unit report, "Investing in Prevention: An International Strategy to Manage Risks of Instability and Improve Crisis Response," 2005. ¹⁵ Nicholas Sambanis, "Using Case Studies to Expand Economic Models of Civil War." Perspectives on

Politics, 2, 2, 2004: 259-279.

¹⁶ U.N. High Commissioner for Refugees, "Sierra Leone: From Cease-Fire to Lasting Peace?," *WRITENET Reports*, available online at: <u>http://www.unhcr.org/cgi-</u>

¹⁷ On poverty and the duration of conflict, see Paul Collier, Anke Hoeffler and Mans Soderbom "On the Duration of Civil War" *Journal of Peace Research* 41, 3: 253-273, and James D. Fearon, "Why Some Civil Wars Last So Much Longer Than Others?," *Journal of Peace Research*, 41, 3, 2004: 275-301. On poverty and the recurrence of conflict, see Barbara F. Walter, "Does Conflict Beget Conflict? Explaining Recurring Civil War," *Journal of Peace Research*, 41, 3, 2004: 371-388.

creating investment. East Timor's child mortality rate remains among the highest in the world, and over 50% of young men and many veterans have no jobs, heating a cauldron of disaffected youth.¹⁸

Civil wars tend to be long, and their resolution often falters. By one estimate, civil wars last an average of 16 years.¹⁹ One-third of those that end later reignite.²⁰ Thus, poor countries can fall into a vicious cycle termed the "conflict trap."²¹ This trap can be broken or avoided when economic performance improves in post-conflict countries. Mozambique exemplifies the alternative path. In the years since the war ended in 1994, Mozambique, one of the world's poorest nations, has achieved average annual GDP growth of 8.1%, according to the World Bank. Gross primary school enrollment jumped from 60% in 1995 to roughly full enrollment for the period 2003-2005. Sustained economic growth and investments in social services contributed to a 16% reduction in poverty from 1997 to 2003.²² Mozambique now appears among the more stable, young democracies in Southern Africa.

When conflicts ignite, they function as the ultimate killer of innocents. They also can be sink holes that destabilize entire regions, as did Liberia and Congo, and require costly international peacekeeping and humanitarian interventions. At the same time, conflict zones provide the optimal anarchic environment for transnational predators: international criminals as in Haiti and Moldova; drug producers and smugglers as in Afghanistan, Tajikistan and Colombia; weapons traffickers as in Somalia and West Africa; international terrorists as in Bosnia, Sudan and Iraq; and deadly pathogens as in Congo, Angola and Uganda.

TERRORISM

Most dangerous are those conflict zones that collapse into fully failed states, which lose the ability to control much of their territory. Afghanistan and, most recently, Somalia are classic failed states where anarchy facilitated the ascendancy of Islamic extremists who gained their foothold by defeating warlords and providing essential social services to bereft populations. Prior to the June 2006 take-over by the radical wing of the Islamic Courts Union, Somalia served as an operational base for Al Qaeda-linked terrorists. The perpetrators of "Black Hawk Down" are believed to have received arms and training from Al Qaeda for the 1993 attack on U.S. forces. Several Al Qaeda operatives implicated in the East Africa embassy bombings have taken refuge in Somalia. Arms smuggled from Somalia were used in the 2002 Mombassa attacks. More recently, terrorists with ties to Al Qaeda killed a series of Western civilians in Somaliland, Mogadishu and other parts of the country.²³

¹⁸ Lawrence Korb and Arnold Kohen "The World Must Heed the Harsh Lessons of East Time." *The Financial Times*, June 30, 2006.

¹⁹ Fearon (2004), *op. cit.*

²⁰ Walter (2004), *op. cit.*

²¹ Collier, Paul *et. al.*, *Breaking the Conflict Trap: Civil War and Development Policy*, World Bank Policy Research Report, 2003.

²² World Bank, *The World Bank Country Report: Mozambique*, April 2006.

²³ International Crisis Group, "Somalia's Islamists," Africa Report No. 100, December 12, 2005.

Yet, weak states need not collapse into conflict or fail before they can be exploited by terrorist groups. Al Qaeda has preyed on the territory, cash crops, natural resources and financial institutions of low-income but comparatively more stable states from Senegal to Yemen. Militants exploited poor immigration, security and financial controls to plan and carry out terrorist operations in Kenya, Tanzania and Indonesia. It is estimated that Al Qaeda and its affiliates operate in approximately sixty countries worldwide.

Mali is an example of a well-governed country that suffers from capacity gaps that extremist groups have been able to exploit. Ninety percent Muslim and a multi-party democracy since 1992, Mali cooperates fully with the United States on counterterrorism matters. It remains, however, an extremely poor state with GNI per capita of \$380. An estimated 72% of its almost 12 million people live on less than \$1 per day, and income inequality is high.²⁴ Mali's human development ranked the fourth lowest in the world in 2005. Land-locked and bordering seven states - Mauritania, Algeria, Cote D'Ivoire, Guinea, Senegal, Burkina Faso and Niger -- Mali is roughly the size of Texas plus California. Malian authorities have struggled, often without success, to prevent Al-Oaeda-linked terrorists of the Algerian-based Salafist Group for Preaching and Combat (GSPC) from operating on its territory. Mali's poorly-controlled borders, nomadic populations, vast uninhabited spaces and under-resourced security services render it an attractive recruiting, training and hiding place for the GSPC. Its leader, Amari Saifi (known as "El Para") and his associates evaded capture in the Northern Malian desert for six months before releasing 32 European hostages seized in southern Algeria. The GSPC also utilizes Mali's centuries-old, trans-Saharan Tuareg trading routes to smuggle cigarettes and other contraband to raise cash for operations.²⁵

Mali's poverty renders it vulnerable to terrorist infiltration in another critical way. Like several poor, weak states with large Muslim populations (such as Pakistan, Bangladesh, Somalia, and Nigeria), Mali's government lacks the resources and institutional capacity to provide adequately for its citizens. Large numbers do not have enough to eat or have access to potable water, basic medical care or educational opportunities for their children. In Mali, as elsewhere, the social services gap is being filled by outsiders, often Wahabist charities and mosques funded from the Gulf States. As Abass Haidara, Imam of the historic Sankore Mosque in Timbuktu, explained: Wahabists are setting up mosques all over northern Mali, often right next door to the indigenous Sufi mosques. They offer what the Sufi cannot – food, clothing, medical care, schools and the opportunity to send young men to Saudi Arabia for religious training. When those newly minted Wahabist, Haidara says, take the long view – over generations – as slowly they work to drive the traditional mosques out of existence.²⁶

There is recent evidence that Al Qaeda strategists deliberately target weak, poor states. The Combating Terrorism Center of the U.S. Military Academy at West Point calls **THE MANAGEMENT OF SAVAGERY: THE MOST CRITICAL STAGE THROUGH WHICH THE UMMA WILL PASS** "one of the most recent and significant" jihadi strategic texts. In it,

²⁴ CIA Factbook (estimate as of 2001), available online at: http://www.cia.gov/cia/publications/factbook/.

²⁵ International Crisis Group, "Islamic Terrorism in the Sahel: Fact or Fiction?," Africa Report No. 92, 31 March, 2005: p. 18.

²⁶ Interview with Abass Haidara, Imam of Sankore Mosque in Timbuktu, Mali., London, April 23, 2005.

author Abu Kakr Naji outlines successive stages in establishing an Islamic caliphate. A key stage, "the management of savagery," aims to bring order, security and Islamic sharia rule to formerly chaotic states, such as pre-Taliban Afghanistan, so they can form the foundation of an eventual caliphate. Naji writes: "... the states initially designated for inclusion in the group of priority regions are the regions of the following states: Jordan, the countries of the Maghrib, Nigeria, Pakistan, and the countries of the Haramavn and the Yemen." The "common links between states in which the regions of savagery can come into being" include: "the weakness of the ruling regime and the weakness of the centralization of its power in the peripheries of the borders of its state and sometimes in internal regions, particularly those that are over-crowded" and "the presence of jihadi, Islamic expansion being propagated in these regions."²⁷ Similarly, a recent article by Abu Azzam al-Ansari, entitled "Al Qaeda Moving to Africa" in Sada al-Jihad, an on-line jihadi magazine, cites the weakness of Africa's states and pervasive corruption as an advantage, making it an easier place to operate than "in other countries which have effective security, intelligence and military capacities." The same author also writes that Africa's poverty and social conditions "will enable the mujahadeen to provide some finance and welfare, thus, posting there some of their influential operatives."²⁸

Disease

Poverty increases the risk of human exposure to pathogens and severely constrains poor countries' capacity to prevent, detect and treat deadly disease outbreaks or to contain them before they spread abroad. The incidence of deaths due to infectious disease is rising. Two times more Americans (a total of 170,000) died of infectious diseases 2000 than in 1980.²⁹ Of the roughly thirty new infectious diseases that have emerged globally over the past three decades, many such as SARS, West Nile virus, HIV/AIDS, Hepatitis C, and H5N1 avian flu virus originated in developing countries that had rudimentary disease surveillance capability.

Growing population pressure impels people seeking arable land, firewood and water to press deeper into previously uninhabited areas. The risk of human exposure to zoonotic diseases consequently increases. Poor families in developing countries also often live in close proximity to their livestock, which provide sustenance and income. Chickens and pigs have proved the source of deadly diseases that jump from animal to human. H5N1 avian flu is the most alarming recent example. Should that virus mutate into a form easily transmissible from human to human, the threat of a global pandemic becomes imminent. With mortality rates currently exceeding 50%, if a mutated virus retains the virulence of current strains, it could kill tens of millions worldwide. As of July 4, 2006, the H5N1 virus had been confirmed in humans or animals in at least 48 countries, including some of the most impoverished, remote and poorly-governed parts of Asia and Africa (e.g. Nigeria, Sudan, Cote D'Ivoire, Niger, Burkina Faso, Myanmar, Cambodia, Laos, Vietnam, Indonesia,)

²⁷ Abu Bakr Naji, *The Management of Savagery: The Most Critical Stage Through Which the Umma Will Pass* (translated by William McCants), Combating Terrorism Center, May 2006, pp.15-16, available online at <u>http://www.ctc.usma.edu/naji.asp</u>.

 ²⁸ Douglas Farah, "Jihadists Now Targetting Africa," available online at: <u>http://www.douglasfarah.com/</u>.
²⁹ National Intelligence Council, "The Global Infectious Disease Threat and Its Implications for the United States," January 2000, p.4, available at <u>http://www.odci.gov/cia/reports/nie/report/nie99-17d.html</u>

adding to fears that the virus could mutate as a result of contact between animals and humans. At the same time, if a deadly mutation first occurs in a country with weak health care infrastructure, the odds of detecting and swiftly containing the outbreak are reduced.

The Democratic Republic of Congo (DRC) is one of several Central African epicenters of disease. Congo experienced its first known outbreak of deadly hemorrhagic Ebola fever, which the World Health Organization characterizes as "one of the most virulent diseases known to mankind," in 1976. The fatality rate was roughly 90%. More recent outbreaks in 1995, 2002 and 2005 killed at least 75% of their victims. The Ebola strain that first emerged in D.R. Congo spread to Gabon, Uganda and South Africa. It has the potential to travel anywhere in the world because it is highly transmissible by contact with bodily fluids (including blood, sweat and saliva) and has an incubation period of two to twenty-one days.³⁰

Congo is uniquely ill-equipped to detect, treat and contain disease. Its population is extremely vulnerable (with 71% malnourished in 2000/2002 up from 32% a decade prior and roughly 20% under five mortality).³¹ The DRC's per capita expenditure on the health sector is the lowest of any country in the world (\$14/per person in PPP terms).³² The continuing conflict in Eastern Congo and the presence of approximately 17,500 U.N. peacekeepers increases the possibility that foreign military, police or aid workers could contract infectious agents and transport them abroad. For instance, a June 2006 suspected outbreak of pneumonic plague in the violent Ituri region, where UN forces have been active, sickened 100 and killed almost 20% of its victims. If detected early enough, antibiotics can treat the disease, which is contracted through contact with infected rodents or fleas or by airborne transmission of bacteria. Unfortunately, DRC's poor surveillance and control mechanisms make early treatment less likely, particularly since conflict impedes access for international health workers.

While Ebola and the similar Marburg virus have not vet spread beyond Africa, other new or re-emergent infectious diseases have. These include polio, which was almost eradicated before spreading to Indonesia from northern Nigeria in 2004-2005. The occasionally-deadly West Nile Virus, a mosquito-borne disease that originated in Uganda, reached New York City in 1999 presumably by aircraft, and is now found throughout the continental United States. Rift Valley Fever, which can cause blindness but rarely death, spread from East Africa to Yemen and Saudi Arabia in 2000, infecting hundreds. Lassa hemorrhagic fever, endemic in West Africa, particularly the Mano River region, infects an

³⁰ Centers for Disease Control and Prevention, Interim Guidance about Ebola Virus Infection for Airline Flight Crews, Cargo and Cleaning Personnel, and Personnel Interacting with Arriving Passengers, available online at: http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/ebola/Ebola_airline.pdf; and,

U.S. Army Medical Research Institute of Infectious Diseases, USAMRIID's Medical Management of Biological Casualties Handbook, Fifth Edition, August 2004, accessed online at:

³²W.H.O., W.H.O. Statistics, Core Health Indicators, available online at:

http://www3.who.int/whosis/country/compare.cfm?country=COD&indicator=PcTotEOHinIntD&language =english.

http://usamriid.detrick.army.mil/education/bluebookpdf/USAMRIID%20Blue%20Book%205th%20Editio n.pdf. ³¹ U.N.D.P., *Human Development Report 2005*, pp. 243 and 253.

estimated 100,000-300,000 people each year with flu-like symptoms.³³ Fatality rates can reach 15-20%, especially among hospitalized patients, where human to human transmission can occur via blood or human secretions. There have been several fatal cases among UN peacekeepers deployed to bring stability to Liberia and Sierra Leone.³⁴ An estimated 20 cases of Lassa have been reported outside of Africa, including one American businessman who perished upon return to the U.S. Before he died, he came into direct contact with 188 people in the U.S. while his fever was believed to be contagious. None of them died.³⁵

Inadequate health care infrastructure hampers disease detection and containment not only in Africa, nor even in the poorest, weakest states around the world. Bangladesh, which remains poor, has made important gains in some aspects of its social infrastructure but still spends relatively little per capita on health (about \$68 in PPP terms, as of 2003) - the same amount as Burkina Faso and less than North Korea.³⁶ Its lack of capacity in the health sector may have contributed to Bangladesh's difficulty in investigating five outbreaks of the Nipah virus since 2001, which first appeared in Malaysia and has resulted in fatality rates as high as 75%. The virus is not known to have spread from Bangladesh, though it is fairly contagious and has a relatively long incubation period.

In Latin America and the Caribbean, mosquito-born dengue fever, including the deadly hemorrhagic variety, is resurgent, afflicting locals and foreign travelers in growing numbers. Dengue's global distribution and impact on humans is now deemed comparable to malaria by the Centers for Disease Control, except in Africa. Dengue is believed to have first appeared in the western hemisphere in Brazil via mosquito-infested ships from South East Asia in the 1990s. Urbanization, population growth and deteriorating public health infrastructure have increased the prevalence of dengue in Central and South America.³⁷ The Aedes mosquito, which carries the virus, is now common in parts of the U.S. south and southwest. As the U.S. climate warms, dengue will likely spread further within the U.S.

Environmental Degradation

The relationship between poverty, state weakness and environmental degradation is complex and mutually reinforcing. Population growth is fastest in the developing world. Poverty can prompt families to produce more children to counter high infant mortality rates and to increase income. Population pressure, in turn, heightens demand for arable land for

http://www.cidrap.umn.edu/cidrap/content/bt/vhf/news/jul0706dengue.html. See also Division of Vector-Borne Infectious Diseases (C.D.C.), "Dengue," available at: http://www.cdc.gov/ncidod/dvbid/dengue/index.htm#history.

³³ J.B. McCormick, "A Prospective Study of the Epidemiology and Ecology of Lassa Fever," Journal of Infectious Diseases, March, 1987.

³⁴ W.H.O., Weekly Epidemiological Record, 11 March, 2005, available online at: http://www.who.int/wer/2005/wer8010.pdf.

³⁵ C.D.C., Morbidity and Mortality Weekly Report, October 1, 2004, available online at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5338a2.htm.

³⁶ W.H.O., W.H.O. Statistics, Core Health Indicators, available online at: http://www3.who.int/whosis/country/compare.cfm?country=BGD&indicator=PcTotEOHinIntD&language

<u>=English</u>. ³⁷ Center for Infectious Disease Research and Policy, University of Minnesota, "Dramatic Dengue Spike Among U.S. Tropics Travelers," available online at:

subsistence and cash crops as well as for energy. Energy consumption in the poorest countries often takes the form of wood burning. Demand for arable land, firewood and logging for precious hardwoods combine to accelerate deforestation. Weak states typically lack the will and the means to prevent peasants, farmers or even foreign logging operations from chopping down forests and woodlands. Moreover, in war zones, like Liberia and Cambodia, precious hard woods have been logged and sold in large quantities to fund conflict. The result is the loss of tree cover at alarming rates in many of the poorest states from Nigeria to the Congo River basin to Laos. According to the Food and Agriculture Organization, deforestation is costing the world an estimated 13 million hectares of forest (the rough equivalent of Panama or South Carolina) each year, mostly in South America and Africa.³⁸

Haiti and Madagascar dramatize the negative relationship between poverty and environmental degradation. With 70% unemployment and an estimated 65% percent of its population living below the national poverty line, Haiti is the poorest country in the Western hemisphere. One of the few sources of fuel there is firewood, and cutting down trees to make charcoal provides a rare source of income. Peasant farmers exacerbate the problem, as they clear land to try to feed their families. As a result, in stark contrast to the more affluent Dominican Republic next door, Haiti is now 90% deforested as 30 million trees are cut down each year.³⁹ Tree cover in Haiti has plummeted from approximately 60% in 1923 to less than 2% at present.⁴⁰ The 2004 floods that killed an estimated 3,000 Haitians after Tropical Storm Jeanne indicate the deadly short-term consequences of extreme deforestation. While most of this logging is not legal, the fragile Haitian government does not have the resources to enforce its own laws.

In even poorer Madagascar, the practice of "tavy" or slash and burn agriculture by subsistence farmers and cattle herders has contributed to the loss of 80% of the country's tropical rainforest cover. Erosion causes Madagascar's rivers to run red into the Indian Ocean.⁴¹ Logging, often illegal, of valuable Malagasy ebony and rosewood intensifies deforestation. Between 1990 and 2005, Madagascar lost 14.3% of its forest and woodland habitat.⁴² This rapid loss, now estimated to be one percent of remaining forests per year, is especially worrying, because Madagascar is a tremendous source of global biodiversity. It is home to five percent of the world's plant and animal species, 80% of which are unique to the island.⁴³

http://www.usaid.gov/pubs/cp98/afr/countries/mg.htm.

http://rainforests.mongabay.com/deforestation/2000/Madagascar.htm. ⁴³ Wikipedia.com, "Madagascar," available online at:

³⁸ U.N. Food and Agriculture Organization (FAO), "Deforestation continues at an alarming rate," FAO Newsroom, November 2005, <u>http://www.fao.org/newsroom/en/news/2005/1000127/index.html</u>.

³⁹ "Trees in Haiti Fall Victim to Poverty of the People," *The Associated Press*, March 23, 2003.

⁴⁰ Charles Arthur, "Squalid Excuses" *The Guardian*, September 29,2004.

⁴¹ U.S. Agency for International Development, "USAID Congressional Presentation FY 1998: Madagascar," Agency Goal: Protecting the Environment,

⁴² Mongabay.com, "Statistics: Madagascar," available online at:

http://en.wikipedia.org/wiki/Madagascar. See also Mongabay.com, "Statistics: Madagascar," available online at: http://rainforests.mongabay.com/deforestation/2000/Madagascar.htm.

The adverse global consequences of deforestation are multiple and serious. Erosion exacerbates flooding and causes the silting of waterways. Soil degradation reduces agricultural yields and thus increases hunger. Precious biodiversity is irreparably lost. Forests, which contain half the world's biodiversity, hold the key to curing many deadly diseases. For example, Madagascar's native, endangered rosy periwinkle plant is used to treat leukemia and Hodgkin's disease. Deforestation leads to drought and disrupts the hydrologic cycle in tropical rainforests by reducing evaporative cooling facilitated by moist canopy cover.

Finally, deforestation accelerates climate change. While fossil fuel-burning in developed and emerging countries accounts for the majority of global carbon emissions (totaling an estimated 6 billion metric tons a year), according to NASA, deforestation is responsible for over 25% or 1.6 billion metric tons of carbon released annually into the atmosphere.⁴⁴ Forests are "carbon sinks" that store carbon from the atmosphere; their loss reduces global carbon absorption capacity. Cut and rotting trees or stumps, moreover, release additional carbon that joins with oxygen to become CO_2 . Burning of trees for fuel and other purposes compounds CO_2 emissions. As global temperatures rise because of these atmospheric changes, coastal areas become more vulnerable to flooding, lakes dry up, and some landlocked areas grow more prone to severe drought, which, in turn, increases the risk of instability and intensifies poverty. Indigenous species get driven from their natural habitat, coral reefs become bleached, and disease vectors change, bringing once tropical illnesses into temperate zones.

CONCLUSION

Environmental degradation is but one of the several serious consequences of persistent global poverty and weak state capacity. The fact that the impact of poverty and weak states on U.S. and global security is neither simple, linear, nor necessarily swift does not make the linkage any less real or significant. Efforts to illuminate the complex relationship between poverty and insecurity may be unwelcome to those who want assurance that global poverty and U.S. national security are unrelated. Yet, we ignore or obscure the implications of global poverty for global security at our peril.

⁴⁴ NASA, Earth Observatory, "Tropical Deforestation," p. 3, available at: <u>http://earthobservatory.nasa.gov/Library/Deforestation/printall.php</u>.