

Inauguration address for the Irwin H. Rosenberg Professorship of Nutrition and Human Security

Human Security and the Pivotal Role of Science in Achieving It.

Peter Walker, November 2006, Boston

Dear friends and colleagues,

Human security is not rocket science. It is the sum of all those things which make you feel secure: a job, education, the rule of law, freedom from fear, or reliable and safe food. And if you are secure and your friends are secure, then so too is your community. Human security, unlike national security, is therefore indivisible. You depend upon the commodity chain I am part of. Your small arms supply fuels my war. My pollution drives your climate change.

Human security is pervasive, indivisible - and under increasing threat.

And so if I may, I'd like to use the next twenty minutes or so to do three things. *First* to lay out what I think are going to be the key determinants of human security over the next generation. *Second*, I want to highlight the applied research approaches the Feinstein International Center will pursue in promoting human security. *Finally* I shall reflect on the challenges in pursuing this particular type of work through scientific research. This last point will allow me to reflect a little on why Tufts, in particular, is the right place to do this work.

Key Determinants of Human Security

I believe that our human security, and that of our children, whether here in the USA, in Africa or just about any other location on this globe, is going to be shaped by four powerful forces.

- climate change
- globalization
- empire change
- and the all too pervasive attitude-virus of "them and us".

All are critical, but climate change is *the* factor. I'm sure most of you heard reference to the Stern Report issued in the UK last week. This is not just the latest in a long line of reports building the science of climate change. It is fundamentally different in that it takes off-the-shelf science and asks the economic question "so what?"

Here's the so what. If the big carbon dioxide emitters (that means the US, Europe, China and India) do not take radical action now, then by the end of this century:

- Rising sea levels could leave 200 million people permanently displaced, most of them in the coastal plains and mega cities of Asia.
- Melting glaciers will increase flood risk followed by the seasonal drying up of major glacial fed rivers like the Ganges and Brahmaputra.ⁱ
- Crop and fishery yields will be in decline, particularly in the tropics and subtropics, and that means Africa.
- In the worst case scenario global consumption per head will fall 20%.ⁱⁱ

We know from studies already underway in Africa, that many of its vital ecosystems are critically fragile and increasingly frayed by human exploitation. UNDP's 2006 Human development Report released last week shows how Africa's rural population is almost totally depended upon rain-fed agriculture for their staple food needs. They predict that by 2080 climate change will have caused a 25% drop in the productivity of the rain fed systems across the continent.ⁱⁱⁱ As Africa's ecology changes, and changes rapidly under the pressure of climate shift, African societies and economies will have to adapt equally rapidly and radically to survive. Yet neither Africa's traditional systems of governance nor its state systems have shown any propensity for such rapid and peaceful change driven by the survival needs of its people. On the contrary, most rapid change has been in the direction of dictatorship, increased militarization, exploitation and violence. This disconnect between the pace of environmental change, and Africa's ability to adapt appropriately, will almost certainly lead to more poverty, more civil war and more acts of genocide and ethnic cleansing.

In our research in Northern Uganda we are increasingly encountering agriculturalists and pastoralists fighting over dwindling water supplies. Literally fighting, with AK47s.

And we must remember that Africa, and indeed most of the poor south, basically had no hand in creating this crisis. The crisis is of the North. The New Economics Forum, in a report released last month calculates that between 10 and 40 billion dollars are needed annually for Africa to counteract the effect of Northern induced global warming, but industrialized countries have coughed up a pittance so far to pay for their public nuisance, while they continue to spend 73 billion dollars a year on their own fossil fuel subsidies.^{iv}

The Stern report also demolishes the neo-conservative argument that stopping global warming is just too costly. Stern shows that the likely cost of allowing warming to continue is at least 20 times the cost of stopping it for this century alone.

Reversing global warming is the task of scientists, economists and politicians in the North. Coping with its dire consequences is the lot of both North and South, but we can anticipate that those in the South, weakened by underdevelopment, poor governments and conflict, will be hardest hit. Allying with them to address the causes and consequences of increased insecurity should surely be a primary objective of the human security researcher?

Globalization and unchecked capitalism

At the same time as we are waking up to the insidious process of global warming, we also need to deal with the consequences of globalization, the second major determinant of human security. The New York journalist, Thomas Friedman, sees globalization as creating a flat world^v. A world in which location becomes less of an issue and all economies have a chance to compete in a global market – the ultimate expansion of free market capitalism. But we should recall our history. Adam Smith, the 18th Century father of capitalist theory realized that an unfettered free market was a recipe for political disaster; that the power of reason and popular need must of necessity be there to balance greed and self interest. In *The Wealth of Nations* he praises the free market of small businesses with hands-on involved owners and a benevolent state watching out for the creation on monopolies of power and wealth. *The Wealth of Nations* was actually Smith's second great book. His first, *A Theory of Moral Sentiments*, examines the role of sympathy and altruism, in shaping his vision of the New Jerusalem. Left to themselves, unfettered free markets increase the gap between the rich and the poor. In the United States today the wage differential between top CEOs and their workers has gone up from 40 times two generations ago, to 400 times today. Corporate America contributes a smaller percent to the country's tax revenue today than it did 100 years ago.^{vi} And yet we seek to export this model.

The tacit assumption amongst rich and economically powerful nations is that a mix of representative government, free market economies, and reformed state structures is the norm for the globalized future. But getting there is no smooth journey.

As Northern state apparatus shrink in the social welfare fields—education, healthcare, pension support—they grow in the security fields, meaning more militarization of societies, larger portions of the budget going to national security and more intrusion into the police and judicial apparatus by political and religious actors. Partly as a rebuttal to this, but also because of the tensions and space that these changes have created, there is a growing

assertion of alternative ethnic and religious-based values and forms of governance. This is one of the driving forces behind the rise of militant Islam and parallel forms of fundamentalism.

Global trade is increasingly interconnected—and not only the trade for energy and primary resources to feed the hungry beast of consumerism. The prosperity of pastoralist communities in Southern Ethiopia is as dependent upon the interpretation of WTO trade regulations for Ethiopian meat products as it is upon fodder and water availability. Local problems increasingly require global awareness and need global solutions.

Against this background our research should seek to understand the complex interplay of local resources and practices with national and global systems. Which levers will best unlock the prosperity of farmers in Northern Darfur? Which levers keep those same farmer safe from violent attack? Are they found in the displaced person camps in the desert, in the corridors of power in Khartoum, or in the negotiating halls of the WTO in Geneva?

Empire change

Climate Change and globalization represent real and concurrent threats. They represent threats for the South (and some opportunities of course) but they also represent a very real threat to the most powerful nation on earth. This is our third key driver.

The king is dead; long live the king – the traditional cry of regime change in Europe. Today of course it is empires, not kings that come and go. In historical times we have seen the rise and fall, in fairly rapid succession, of the Spanish, Dutch and British Empires, and we now look at the American empire. Where does it rest in the inevitable cycle of rise and fall?

The Dutch empire was powered by wind and water, and supplanted by the more efficient coal fueled British. They in turn started to decline at the end of the 19th century. Correlli Barnett describes Britain in the pre World War One era as “a working museum of industrial archeology”^{vii}, but it wasn’t really until the 1940s that the idea sunk home to most Brits and not until the 1960s that it was deemed to be well and truly dead. So decline can take decades.

Most empires, towards the end of their reign, become over confident. They over stretch themselves militarily and economically. They embark upon unwinnable wars; they over borrow against the collateral of their power.

What does this tell us about America? Our national, cooperate and personal debt is colossal. American consumers spend on average 1.6 times what they earn each year. We

seek to make money from money, not from produce or goods or services. By the year 2000 the US financial sector outstripped by 30% the entire manufacturing sector^{viii}.

The key issue is that America has become obsessed with the here and now, with cash in hand today. It's investment in the long term; in education, in alternative energy, in public health, all seem to be subservient to the short term bottom line. And so gradually, not with a bang but a whimper, imperial nations sink back, to be just one amongst many. If I was a betting man I would bet that America is in the last days of its imperial oil-driven reign. History may show that it is already in decline, and if it has a successor, it will be China.

And here's the rub. We have no idea what this means for human security. Will China be an imperial power concerned with the common good or with the exploitation of the margins for the metropolitan center? Will the US bow out graciously and adopt a statesman-like pose of international cooperation, or go down like a cornered animal, lashing out at all who come near?

Us and Them: the shaky contract between governance, power and people

All three of the processes I've touched on spell out threats: Threats to the powerful and threats to the survival of those disenfranchised and excluded, neglected or exploited. When people are threatened on mass they often revert to their more animal instincts.

You are either with us, or against us in this war. "We cannot afford to be dependent for our energy on countries where they really don't like us and want to kill us" to quote the elected leader of one large nation. They are blasphemous infidels, we have a place in heaven.

This polarization is like a virus, an attitude-virus of "them and us".

Civilization nearly destroyed itself in the 1940s in the Second World War and as people stepped back from the brink, universally sickened by war, they sent a powerful message to their governments to create a new world order which shunned the viral infection of them and us. A powerful step towards that new world order was the creation of the United Nations.

Let me read you verbatim from the beginning of the UN charter: it is so powerful.

We the people's of the United Nations, determined to save succeeding generations from the scourge of war, which twice in our lifetime has brought untold sorrow to mankind, and to reaffirm faith in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations

large and small, and to establish conditions under which justice and respect for (our) obligations ... can be maintained, and to promote social progress and better standards of life ... And for these ends: (will) practice tolerance and live together in peace with one another as good neighbors, ... and (will) employ international machinery for the promotion of the economic and social advancement of all peoples.

In today's atmosphere of mistrust, of survival and expansion through aggression, of the Global War on Terror, and that terror itself, we are in grave danger of losing the spirit and the institutions of this unique opportunity. And of losing them at the very time in our planet's history when that are most needed. We can only survive climate change, and empire change, we can only manage and shape globalization for the good of all, if we do so through cooperation for the common good. United we stand; divided we fall: we all fall. It may sound trite, but it's true.

Key lines of research

I firmly believe that our job as social scientists today as we research human security is to provide the rigorous evidence needed to fight back, in a quiet but inexorable fashion, against those forces that fuel inequity and injustice, that assault the right to life with dignity. The challenge is global, its ramifications are unprecedented and many of them unknown. The timeframe over which these changes will happen are uncertain.

I would identify four particular foci to human security research we need to address in fighting back.

First, a field based livelihoods analysis which seeks to understand, from the bottom up, just how communities and households under stress put together their survival strategies and economies, and how institutions, policies and politics impact upon these. This is the sort of research the Center is now pursuing in northern Darfur, which is uncovering the crucial role that diaspora remittances play in helping people survive the trauma of the conflict there.

Second, in our globalized world we need to better understand the value-added chain. Just what happens between the coffee producer in the Ethiopian highlands and the Starbucks consumer in Boston? Where are the leverage points that can be affected to allow Starbucks to turn a profit yet to maximize the percentage of that profit that gets back to the producer? How can we help ensure that trade is fair trade?

Third, we need to understand the holistic nature of violence, as distinct from force, in today's conflicts. In work we are doing in Uganda and Sudan, it is clear that international

policies around the Global War on Terror have become enmeshed with local power struggles, traditional tribal rivalries and war profiteering to drive the conflict there. If we do not understand the complexity of this, or any other war, we have no chance of identifying the best places to affect change towards justice, peace and a sustainable future.

Finally we need to understand better what drives the major institutions that intervene in these crises, be they governments, aid agencies, peace keepers or the International Criminal Court. Often our best hope for affecting change for the common good is through influencing these institutions. To do that, it is not enough just to present our robust field research, we need a second tier of research which seeks to understand “the ecology of the intervention” that is, just how the organizations, systems and policies that make up the intervention function. Armed with this, we can make the best use of our field research to create positive change. The Feinstein Center is doing this through its work with the International Criminal Court, the peace building agenda in Sudan and Uganda and supporting strategic change processes with some of the large trans-national NGOs.

The Challenge of and to Science

All of this research and its application fits fair and square within the pursuit we call science, a pursuit which is increasingly under attack. But before addressing that attack, let me remind you of the genesis and purpose of science.

William Gilbert, the father of modern science, writing in 1600 fumed that “Modern philosophers, dreaming in the darkness, must be aroused and taught the uses of things. They must be made to quit the sort of learning that comes only from books, and that rests only on vain arguments and upon conjectures.” A generation later Francis Bacon laid out the basic methodology of induction and the vital role of inspiration in uncovering knowledge. He was also convinced that the purpose of science was to improve the common good. Science was applied philosophy for Bacon. In the 1660s Robert Hooke established the principle of investigation through repeatable experiments, and hard on his heels the eccentric but brilliant Isaac Newton added the final ingredient of mathematical proof. And for 350 years scientific enquiry, with all its careful checks and balances, attention to rigor and hunger for truth has fueled the prosperity of nations, particularly this nation, the United States.

I am concerned though that today the methodology of science is under attack and this at a time when the very survival of our societies are dependent upon accepting the findings of rigorous science and more importantly accepting the consequences of those findings.

Science is under assault because it lays bare uncomfortable truths. The truth that cigarettes kill, that our agro-food system knowingly shortens the lives of the poorest in our communities and that climate change is for real and is our fault.

This is the kind of headline science that is targeted, but the attack techniques of those who would rather not hear the facts are consistent, from the attacks on big science headlines to the footnote science on the back page.

Here are the things to watch out for:

Distortion through funding. A 1998 review into research on the health effects of passive smoking showed that the odds of an article reaching a “no harm” conclusion were 88.4 times higher if the authors had tobacco industry affiliations than if they were independent.^{ix}

The quashing of inconvenient science for political ends. We have seen it before with the work on global warming. In our human security work we see it in the attempts to rubbish the epidemiological research from John Hopkins University that estimates that up to 655,000 Iraq citizens may have died in the war there so far^x, or the denial of the social science that shows that by all measures Afghan society has got poorer, more violent, more divided and less stable every year since the US lead invasion^{xi}.

At a personal level the deliberate character assassination of individual scientists is perhaps the most cruel technique. Most people now know of the tremendous pressure NASA’s top climate change scientist Jim Hansen came under to water down his conclusions. Next on the list, and look out for this one, may be Kevin Trenberth. He’s a hurricane researcher whose work links global warming to an increase in the number and severity of Atlantic hurricanes. The kind of hurricane that devastated New Orleans. Kevin has been warned in no uncertain terms that if he persists, lobbyists in Washington will do all they can to get him fired or force him to resign.^{xii}

Finally, there is the insidious attack on the process of science itself. The cherry picking of results to suit a particular politic. The singling out of contrary research to “disprove” the case made by the majority as Thabo Mbeki’s does in his distortion of the cause and treatment of HIV/AIDS. The misrepresenting of “real science” as being 100% certain, which of course it never is and thus remains, in the words of the ideologue, unproven, still uncertain, and doubted by “prominent scientists”.

We must learn from this. Our science must be unimpeachable. We have four hundred years of scientific development to draw upon. We know what good science is: so practice it and practice it for the common good.

Let me reiterate that the irony of those who would attack the science of global warming, or the “collateral damage” of unchecked capitalism is that human security, like human rights, is indivisible. My security is linked to yours. The denial of your human rights will lessen mine. At Tufts we talk of developing global citizens: leaders with a social conscience. Leadership, developed in a university is not about the slick manipulation of political spin, it’s about the application and use of reason, the commitment to move forward with uncomfortable and inconvenient truths. It’s about evidence driven solutions. Global citizens use their leadership skills to promote the common good, not self betterment. They seek to break down the poisonous “them and us,” divide. They seek to expose and redress the processes that lead to massive imbalances in wealth and the violation of the rights of the weakest. They seek to build institutions and enterprises that realize the inalienable right of all peoples to life with dignity. They look to things of the spirit as well as of the mind – art and music, poetry and personal relationships, freedom under the law, faith as well as pragmatism.

That is why we conduct human security research and that is why we seek to do it at Tufts University.

Thank you

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