The Unaccountable Genocide: A Case Study of the Roles of the U.S. State Department and U.S. Government Accountability Office in Calculating the Darfur Death Toll

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Genocide Accountability

Gerald Prunier calls Darfur "the ambiguous genocide." [i] A key source of ambiguity about this genocide derives from the failure of U.S. government agencies to meaningfully hold the Government of Sudan accountable for the death toll in Darfur. More specifically, I argue that the U.S. State Department and the U.S. Government Accountability Office have been key sources of low and uncertain estimates of the scale of mortality in Darfur.

The State Department has vacillated in its public policies about Darfur in a way that we characterize as flip flopping. To do so, the State Department has inappropriately applied concepts and methods from a population health paradigm, while ignoring the relevancy of a crime victimization approach. Subsequently, the U.S. Government Accountability Office [GAO] became more concerned about high than low estimates, including an especially low estimate announced by a deputy secretary of the U.S. State Department during a highly publicized visit to Khartoum in 2005. The effect of the low State Department death estimate announced with an official state visit to Sudan's capital was to reduce public certainty about mass atrocities in Darfur. The effect of increasing this uncertainty was to decrease the public sense of urgency about stopping this genocide and holding its architects accountable. A review of Darfur mortality by the GAO further intensified this uncertainty, which it was presumably intended to reduce.

While the GAO is often known for its dispassionate critiques of government policies and

programs, it has also been criticized for it susceptibility to intra-governmental pressures. *The New York Times* columnist, Paul Krugman, recently reported on the perceived need within the GAO to leak a report on the civilian death toll in Iraq to avoid its conclusions being changed. In this context, Krugman wrote,

> What about civilian casualties? The Pentagon says they're down, but it has neither released its numbers nor explained how they're calculated. According to a draft report from the Government Accountability Office, which was leaked to the press because officials were afraid the office would be pressured into changing the report's conclusions, U.S. government agencies 'differ' on whether sectarian violence has been reduced.[ii]

A subsequent *New York Times* article on the presentation of the GAO report on Iraq to Congress confirmed the pre-leak fears by observing that it was "notably rosier than the draft version."[iii] We will see a possibly related set of issues involving the GAO's treatment of a low but poorly substantiated U.S. State Department estimate of the Darfur death toll. However, before we get to the role of the GAO, we must first provide an overview of Darfur death toll estimates and their origins in two alternative social science research paradigms

"Complex Humanitarian Emergencies" and the Population Health Paradigm

Since the early 1990s and the end of the cold war, the concept of a "complex humanitarian emergency"[iv] has often been used by population health researchers to refer to coerced circumstances of forced migration and mortality in many parts of the world. These emergencies include situations in which efforts to drastically restructure a state, society, or social group have led to civil conflict or international war, resulting in the violent death of large civilian

populations and in their substantial displacement to detrimental living conditions– typically to overflowing and inadequately resourced camps– that in turn become breeding grounds for disease, dehydration, starvation, malnutrition, and other sources of excessive deaths.[v] We first identify key features of these emergencies and then consider how the absence of legal and criminological considerations from the population health paradigm can lead to misleading accounts and bias the estimation and understanding of genocidal victimization.

Although there is debate about the matter, [vi] there is substantial evidence that humanitarian emergencies have become worse over the last century, perhaps especially since the end of the cold war, with a particularly lethal increase in direct violence between racial, ethnic and religious groups.[vii] A finding of particular importance is that civilians have increased as a proportion of all war casualties from about 14 percent in World War I, to 67 percent in World War II, to 90 percent by the end of the 20th century. [viii] Between 1989 and 1999, the number of complex humanitarian emergencies in the world identified by health researchers doubled from 14 to 30,[ix] and the last third of the 20 [th] century saw a near doubling of humanitarian refugees in the world.[x]

The identification of humanitarian emergencies as "complex" reflects from the outset the concerns of public health researchers about the political complications of initiating and sustaining humanitarian relief and assistance.[xi] The first concern reflects the priority these researchers attach to the work of relief agencies in improving the chances that refugees can survive emergency conditions in the face of the "complex social, political, and economic issues" that confront them.[xii] The second concern reflects the desire to neutrally if not euphemistically understand the contexts and arrangements that relief programs adapt to as "by nature complex."[xiii] The third concern reflects the concern that relief agencies nonetheless can and

should not ignore "complex and political" arguments about providing equal medical services to communities where refugee camps are located. [xiv]

The hard and intrusive political realities of the complex humanitarian emergencies just described led health researchers such as Toole and Waldman to call in the post-cold war period on the international community to adopt a policy that recognized and acted on the need to intervene at early stages in "the evolution of complex disasters involving civil war, human rights abuses, food shortages, and mass displacement."[xv] A crucial element of Toole and Waldman's health initiated agenda was their recognition that once health oriented practitioners achieved access to a humanitarian emergency situation and began to prevent excess mortality, they could also begin to play a role in empirically documenting the unfolding course of the emergency as well as its distribution and magnitude. [xvi]

Mortality - which is also of obvious interest to scholars who study crime victimization, international criminal law and a criminology of human rights and war crimes - is the most common dimension used to trace and assess the course of complex humanitarian emergencies. The related study of famines has identified a paradigmatic sequence of mortality and related problems marked by the onset of the crisis, followed by its rise to a peak, by the arrival of emergency assistance, and by a hopefully rapid if belated stabilization.[xvii] Crude mortality rates (CMRs) are calculated to assess the occurrence of deaths for the population affected by the emergency and its duration.

CMRs are usually calculated as deaths per 10,000 population per day to allow comparisons across settings and situations. These rates are classically expected to rise and fall across the stages noted above, tracing an inverted U-shaped curve of mortality that is negatively skewed by the slower pace of onset, followed by a peak and faster rate of decline in deaths. At

least this is the expectation for "standard" rural famines, and the forced migration and mortality at the end of the 20th century in Kosovo, the southern most province in the Republic of Serbia, further exemplified this pattern, as we describe below. [xviii]

A CMR of 1.0 was identified by the U.S. State Department in the mid-1980s as a useful threshold of elevated mortality in complex humanitarian emergencies.[xix] This 1.0 level is two to three times the level of mortality that is regarded as expected or normal in sub-Saharan Africa, and this criterion was adopted in 1992 for public health purposes by the Centers of Disease Control [CDC]. At the same time, the CDC recommended a program of response in which a rapid health assessment would use sample survey methods to establish a baseline mortality rate in a setting, followed by the implementation of a health information system to collect ongoing health data, including mortality.[xx] These developments were spearheaded by epidemiological trained health researchers and have provided an increasingly important picture of the mortality and morbidity surrounding humanitarian emergencies. If criminologists had been involved in these developments, they might have focused more specific attention on identifying criminal sources and responsibility for mortality in these emergency situations. However, criminologists did not become involved in this work during the early post-cold war period.

The primary goal of the population health research on complex humanitarian emergencies has been support for the provision of relief (food, medicine, and shelter) for conflict-affected populations suffering elevated mortality levels. The goal of this research is more often to prospectively plan and provide relief than to retrospectively assign criminal responsibility. Organizations, such as the CDC, have been largely concerned with gathering data as a means to prevent further death, sometimes if not often neglecting the need to assess mortality resulting

from state-led criminal violence and deaths of civilians that occur before they assume refugee status. Yet we have also already seen that this epidemiologically and demographically guided research can provide insight into the patterning of politically instigated violence, which is characteristically revealed to be highly contingent on the people involved and the places where these humanitarian emergencies occur. [xxi]

Perhaps most importantly, this research reveals that internal and external politics, including the reaction (or lack thereof) by the international community, can radically alter the form and scale of humanitarian and human rights emergencies. For example, in the Democratic Republic of the Congo, mortality rates have not significantly improved from an average of .7 deaths per 10,000 population per day since 2002, and these rates are 75 percent higher in conflict-prone regions of this country. [xxii] Overall, less developed countries have higher CMRs and are more vulnerable to upward variations from baseline rates than developed countries, making their humanitarian and human rights emergencies quantitatively and qualitatively distinct. In Zaire in 1994, CMRs for Rwandan refugees reached levels as high as 35 deaths per 10,000 population per day.[xxiii]

Again, although not specifically designed to do so, this body of research further reveals that the population most at risk varies with the nature of the specific roots of the conflict. In the Congo, infants and children under age five have had the most highly elevated mortality rates.[xxiv] In contrast, the elderly were most at risk during the siege of Sarajevo.[xxv] In the Srebrenica massacre, military-age males were most at risk of death.[xxvi] Women everywhere seem most at risk of rape during politically instigated violence within and between nations, even though, as the Abu Ghraib prison scandal illustrated, sexual assaults against males are probably also everywhere undercounted.

The health research literature on complex humanitarian emergencies is increasingly organized around interpersonal age-sex dimensions and the global North-South divide of development. These are clearly powerful contingencies that shape the form and scale of humanitarian emergencies. We still lack comprehensive data on the age-sex composition of elevated mortality in these emergencies, and this kind of data and analysis needs to be better connected to our understanding of the North-South dynamic of development that slowly but increasingly is the focus of thought and attention in the post-cold war world.[xxvii]

Despite the social and political dimensions of human rights emergencies and war crimes, epidemiologically and demographically trained health researchers are inclined to focus mainly on health outcomes, whereas criminologists prioritize issues of political and ultimately legal responsibility. Criminology and law can bring further attention to the understanding of war and human rights crimes that a population health approach neglects. A common sequence in these emergencies involves the onset of violent attacks, the flight of the resulting victims, followed by ensuing health problems, all of which contribute to mortality. The key point is that "the root cause of most complex humanitarian emergencies is that governments and other combatants use violence and deprivation to seek solutions to political problems." [xxviii]

The challenge is simultaneously to keep in mind the cumulative and multiplicative effects of violence, flight, and displacement to concentrated encampments, and the political state and non-state origins of the disastrous consequences. From a criminological as well as methodological perspective, it is insufficient to concentrate on health outcomes of these emergencies without simultaneously acknowledging their political and state origins. When the health and crime perspectives are juxtaposed, important socio-legal issues become apparent. For

example, treatment of the "missing" and of "excess as distinct from normal and expected mortality" and, even more fundamentally, the substitution of the concept of "complex humanitarian emergency" for "war and human rights crimes" raise major questions about our understanding of this subject matter.

It is useful to begin with the treatment of the missing in the calculation of CMRs from population-based surveys, which was introduced above as a central concept and method of the health approach. The calculation of CMRs involves dividing (a) the number of household members reported as deceased for a specified period by (b) the estimated size of the sampled population (with the number of respondents multiplied by average household size) and © multiplying the dividend by 10,000. The denominator in this calculation is designed to represent the population at risk of death.

The convention in the health literature on complex humanitarian emergencies is to include in this denominator the sum of the sampled population and one half of the reported dead, missing, and absent from this population, assuming that the latter on average were at risk of death for half of this survey period. Yet health surveys of these emergencies conventionally do not include consideration of the missing in the numerator of observed deaths, instead essentially treating these persons as missing data. Often, if not usually, the missing persons in these surveys have disappeared in the chaos of the emergency and are feared or presumed dead by family members and human rights groups. However, the focus in health studies is typically on deaths that can be directly identified as resulting from disease and nutritional or other specified causes, and the missing are therefore omitted from consideration. [xxix]

At times, those who study complex humanitarian emergencies add a further category for injuries and violence to these analyses. However, this inclusion of injuries and violence often

covers a restricted recall period of risk or the period while in displacement or refugee camps. Violence that results in deaths and disappearances that precede flights to camps are often treated as of secondary importance or ignored and, like the missing, often are simply overlooked. Rather than focus on assigning criminal responsibility for deaths that precede flight to camps, the health focus is typically on saving the lives of those who survive long enough to get to the camps. Our point is that from a criminological perspective, acknowledging and analyzing those who die and become missing before, as well as while in displacement and refugee camps, is important for the purposes of assigning legal responsibility and understanding the root causes of underlying conflicts.

The concept of excess mortality raises a related set of concerns. Analyses of complex humanitarian emergencies often construct a baseline estimate of mortality by identifying an expected mortality rate for the population of interest and at risk, assuming the absence of the risk. The idea is to estimate those who would have been expected to have died during more normal circumstances. This often can be difficult to do, because circumstances in settings like sub-Saharan Africa seem so seldom to be "normal." In this sense, the task is to construct a "counterfactual" estimate of the "normal" mortality. This expected or normal mortality is then subtracted from the level of mortality observed during the period of the humanitarian emergency. The difference between the "expected" and "observed" mortality is deemed excessive mortality and is used by health researchers as a means of determining the extent and duration of the emergency.

From a criminological perspective, this approach is problematic. Consider the following. An individual or group of individuals in actuarial terms may be expected to die for health reasons within a given period, but during this period of time dies as a result of a criminal human rights

violation, for example, being criminally displaced from his or her home. Dying in one's normal place of residence or work is one thing, but dying in a displacement or refugee camp is quite another. This is no longer "expected" or "normal." The implication is that although designating such deaths as expected or normal may be quite useful for some analytic purposes, including charting the timing and scale of a humanitarian emergency, it is misleading for other purposes, including the legal documentation of the form and extent of human rights crimes and war crimes.

The problems considered for illustrative purposes here– the neglect of missing persons, the failure to consider pre-displacement or refugee camp violence, and the treatment of excess mortality– anticipate a broader problem with the concept of complex humanitarian emergencies. This concept, while helpful in encouraging the creation of population and public health based methods for the study of these disasters, can also have the unhelpful effect of blunting and obscuring the meaning of much that is observed to be happening in such emergencies.

Often as a part of working with affected nations, within and alongside the United Nations, humanitarian organizations seek nonthreatening and unobtrusive methods for addressing human rights abuses. Even threatening nomenclature can result in being denied access to settings and people in dire need of humanitarian assistance. The problem, of course, is that the same states and groups that create these emergencies also restrict access to their victims. Insistence on a criminological perspective has the potential to serve as a counterweight to this problem, but first it is important to appreciate how great this problem can be.

The Humanitarian Strategic Embrace

The humanitarian dilemma posed by efforts to divert and coopt research on human rights abuses is a challenging practical issue that is provocatively depicted in Alex de Waal's book on

Famine Crimes: Politics and the Disaster Relief Industry in Africa .[xxx] De Waal argues that what he calls "Humanitarian International," the complex of NGOs and relief agencies that respond to humanitarian emergencies, often find themselves engaged in a compromised strategic embrace with states that commit the human rights abuses and war crimes whose consequences they seek to alleviate.[xxxi] Accessing and treating the urgent and deadly consequences of these emergencies can obscure if not obstruct efforts to identify and hold their instigators responsible. This observation is particularly apt in Darfur, a setting that as we will see highlights differences in health and criminological perspectives.

The tension that the contradiction between health and crime priorities generates in the politics of the United Nations broke into brief public view when the British House of Commons International Development Committee received testimony in early 2005 from Mukkesh Kapila, the former United Nations Resident and Humanitarian Coordinator for Sudan.[xxxii] Kapila was the highest in-country U.N. official dealing with the response to the unfolding violence against African villagers in the Darfur region of Sudan in February 2003. This was the period of onset in the violent attacks and killings in these villages. More than six months later, in October of 2003, Kapila asked that the violence in Darfur be referred the International Criminal Court. As noted previously, this referral did not take place until the United States finally agreed to abstain in the U.N. Security Council and allowed this referral to go forward in early 2005.

Kapila, who had previously served the U.N. in the Rwandan genocide, was determined that similar events would not be repeated in Darfur. Yet in March 2004 Kapila was removed from Darfur, with the killing still near its peak. The killing was still in progress in early 2005 when Kapila testified to the British parliamentary committee that the death toll was large and still

rising because "fundamentally the issue was that the Sudan government refused to allow us access when we needed it most."[xxxiii] Yet this summary comment only scratches the surface of Kapila's account, which goes on to painfully highlight the conflicted nature of the U.N.'s work with the Sudanese government in response to the killing and resulting health problems in Darfur.

When Kapila was asked how effectively the humanitarian and human rights– or health and crime– parts of the Sudan mission worked together in Darfur, he responded that these were actually competing efforts, that "we had a real struggle to overcome," that a "culture of distrust" existed, and that it was a challenge to "create one U.N. approach."[xxxiv] He explained that political crises are typically categorized as "humanitarian problems" and that those in charge of aid operations are "burdened with the task of doing something about it and when they inevitably fail the blame is put on the humanitarians."[xxxv]

The point here is that if the government instigates the attacks and killings that lead to displacement into camps where many more victims die of disease and malnutrition, the same government can then also conveniently claim that the fault lies with the humanitarian response rather than with the government. At the same time, the rush to meet the humanitarian need for health and nutritional assistance can compete with and produce compromised efforts to highlight the human rights abuses leading to these humanitarian needs. Kapila clearly saw the violence as ethnic cleansing, a form of genocide. Yet he reported that the response from the international community fit into the Sudan government's strategy of demanding that he and his staff work harder to find humanitarian solutions.

Kapila particularly emphasized another side of this dilemma that involved a competition for scarce resources, saying "this happens in organizations that are funded in a way which is reliant on what sort of image you can present and so on. That means that we had $100 million

available for food aid but we had only $1 million available for human rights."[xxxvi] Still, his conclusion was that "even if twice the money came in from the world ... the arguments would have been the same," and that the real problem was "the systematic obstruction by the Sudanese government of humanitarian access."[xxxvii] Kapila's testimony starkly highlights how difficult the relationship is between responding to health and crime issues in humanitarian emergencies. The U.S. State Department and the U.S. Government Accountability Office were implicated in this complicated relationship as they became involved in investigations of genocidal victimization in Darfur. At first, the State Department countered the "humanitarian embrace" by launching its own victimization survey with refugees from Darfur who received sanctuary across the border with U.N. assistance in Chad.

The Atrocities Documentation Survey

In September of 2004, the U.S. State Department published an eight page report whose chillingly cogent tables, charts, maps and pictures spoke volumes in *Documenting Atrocities in Darfur*.[xxxviii] The report was based on survey interviews in1136 refugee households in Chad. The Atrocities Documentation Survey [ADS] on which the report was based enumerated thousands of deaths and many more rapes and atrocities that the respondents personally had seen or heard about before fleeing from attacks on their farms and villages over the previous year and a half in Darfur. Secretary of State Colin Powell made headlines when he summarized results from this survey for the U.N. Security Council and the U.S. Congress as evidence of a racially targeted and militarily unjustified Sudanese sponsored genocide in Darfur.

The release of Powell's testimony by the State Department was followed minutes later by

a separate White House statement from President Bush which again built on the ADS and concluded "genocide has taken place in Darfur." This was the first time an American President had rebuked a sovereign nation by invoking the Geneva Genocide Convention, and certainly the first time that a crime victimization survey had played a support role in the formation of U.S. foreign policy. This victimization survey recorded a level of criminal detail that no health survey could provide. The resulting report outlined the criminology of a genocide.

Colin Powell and the State Department were motivated in the summer of 2004 by horrific news stories of attacks and killings in Darfur, and by the further fact that Congress had already passed a unanimous condemnation of genocide in Darfur. The Administration wanted to reassert a leadership position on this foreign policy issue by providing systematic evidence of the seriousness of the war and human rights crimes that were reportedly taking place.

The challenge was daunting. It included developing the survey instrument, recruiting interviewers and interpreters, planning the logistics of conducting surveys in 19 locations in eastern Chad that were unreachable by normal roads, designing a sampling plan, moving the research team in and out of the survey locations, and organizing the coding and analyzing of over one thousand interviews. Several hundred of the interviews were conducted for Powell's use in his appearance before the U.N. Security Council in July, and the full survey of 1136 households in Chad was completed with a preliminary analysis for the brief *Documenting Atrocities* report that accompanied Powell's Congressional testimony in early September.

The field interviews were conducted in July and August of 2004 by two groups working for two week periods each with 15 interviewers that included area experts, social scientists, lawyers and police investigators. A protocol was developed for the survey that mixed the closed-ended format of a crime victimization survey with the semi-structured format of legal

witness statements. The interviewers worked with interpreters in ten camps and nine settlements across the West Darfur border in Chad. The sampling was systematic. Interviewers randomly selected a starting point in each camp or settlement and then from within this designated sector selected every tenth dwelling unit for interview. All the adults living in the unit were listed on the survey instrument and one adult from the household was randomly chosen for a private interview, resulting in the final 1,136 sampled households.

Up to 20 incidents were coded for each household interview, with detailed information collected about the nature of the crimes. The legally oriented interviewers were intent on collecting responses to their survey questions with sufficient detail to support potential courtroom claims. The *Documenting Atrocities* report of the survey used univariate descriptive statistics and formed the background for Secretary of State Powell's testimony on September 9, 2004 to the U.S. Senate Foreign Relations Committee that genocide was occurring in Darfur.

We used the ADS data to develop a preliminary estimate cited by Save Darfur of 400,000 deaths. However, the ADS was not the only source of data about the conflict in Darfur available during this period. Probably the best known data on this conflict at the time came from survey work conducted by the World Health Organization [WHO] in the internal displacement camps inside Darfur. Since there is no census or hospital data for Darfur from which to otherwise calculate mortality, the breadth of the WHO survey work is important. However, the differences between the ADS and WHO survey contributions also reflect the important distinctions between the crime and health research paradigms. While the ADS design represents a cutting edge example of the use of the crime victimization approach– with its emphasis on incident based reporting of a wide range of different kinds of criminal events before and in the refugee camps– the WHO survey represents an application of the health research approach to complex

humanitarian emergencies– with its parallel emphasis on mortality linked to disease and nutritional problems inside the displacement camps.

Important survey work has also been reported by the French human rights group, Medecins Sans Frontieres [MSF], from surveys conducted in the state of West Darfur. Although the MSF survey work was limited to a smaller number of camps in West Darfur, this initiative represents a unique attempt to combine attention to pre-camp and in-camp experiences, including attention to mortality in both settings. This research will become important in a newer and alternative estimation approach discussed below. First it is important to learn more about the findings of the WHO and ADS studies.

Early Findings from the World Health Organization Surveys

As we have noted, organizations such as the World Health Organization, the World Food Program, and the Center for Disease Control and Prevention – especially in a setting such as Darfur– are understandingly more preoccupied with the immediate and ongoing challenges of disease and malnutrition than they are with the past violence that leads displaced persons to flee to camps in the first place. This is a key reason why Powell's State Department and its ambassador on war crimes needed a crime victimization survey and initiated the ADS.

At about the same time as the ADS, during the late summer of 2004, the WHO was conducting surveys of mortality and other health and nutrition issues with the Sudanese Ministry of Health [henceforth referred to as the WHO/SMH survey] across a large number of camps inside the three states of Darfur. This work produced estimates of crude mortality rates [CMRs] of the kind introduced in the previous chapter. Thus a WHO retrospective survey for two summer months of 2004 produced a CMR of 2.14 for the states of North and West Darfur (South

Darfur was less fully surveyed). Recall that this is a level or mortality from four to seven times normal or expected levels in sub-Saharan Africa.

It is significant to add some further detail about what this CMR calculated by the WHO includes. This CMR is a meaningful estimate of mortality following displacement due to health problems in the camps, with some added deaths resulting from forays outside the camps during this period to collect firewood or other necessities of life in the camps. Few of the deaths included in the calculation of this CMR could have been due to violent attacks prior to displacement. We will say more about this below. Unfortunately, as we also note further below, the latter point was not well understood at the time, and still is not widely understood today. Of course, for criminological purposes, it is essential to have information on the violent deaths resulting from attacks.

The survey work of WHO also became the source of an influential seven month estimate that 70,000 Darfurian refugees had died in just seven months of 2004, with the deaths again coming almost entirely from malnutrition and disease.[xxxix] This estimate was announced personally by David Nabarro, a middle-aged British "public health bureaucrat" who describes himself as wanting to come across as "honest, accurate, down-to-earth, someone who can translate complex facts in a way that makes emotional sense to those receiving them"[xl]

Nabarro concluded from the WHO surveys that deaths were occurring in Darfur at the rate of from about 5,000 to 10,000 persons per month. This estimate required going beyond the original retrospective survey by linking the CMRs with separate estimates of the larger population at risk in Darfur. The latter population was estimated from counts of displaced persons in the camps and reported in U.N. reports known as Humanitarian Profiles. This count

of the population at risk can be used along with the CMR, expressed as the number of deaths per 10,000 population per day, to estimate a monthly death toll. Obviously both the CMR and the internal displaced camp population will vary from month to month. However, in the 2004 summer months covered by the WHO survey, the death toll was probably near its peak, and the emphasis was on trying to gauge this emergency level of mortality.

In March of 2005 a U.N. emergency relief coordinator, Jan Egeland, had just returned from a fact finding trip to Darfur. Egeland is an intrepid investigator of humanitarian emergencies and regularly spoke for the U.N. from many of the most desperate spots on the globe. He was pressed now by the U.N. press corp to provide an updated estimate of the death toll in Darfur. At first he enigmatically responded that it was impossible to estimate the death toll because "it is where we are not that there are attacks." Then when he was asked to comment on the outdated 70,000 estimate, he responded by saying "Is it three times that? Is it five times that? I don't know but it is several times the number of 70,000 that have died altogether."[xli]

Several days later, Egeland obviously had concluded that the imprecision of his earlier answer was unsatisfactory. In a new response to the press, he extrapolated from the U.N.'s WHO survey by multiplying Nabarro's 10,000 per month figure by 18 months instead of seven. The official U.N. estimate thus jumped to 180,000.[xlii] Although this latter estimate was based on no further data collection or analysis, other than simply multiplying the 10,000 monthly estimate by 18 months, Egeland's estimate began to consolidate an early media appraisal of the scale of the genocide in Darfur. While it is doubtful that deaths remained at a constant peak level of 10,000 per month in Darfur for 18 months, there on the other hand were reasons to think the peak monthly death toll was actually higher than 10,000 per month.

A Gathering Consensus

The projection of 180,000 deaths from the WHO survey work was at the lower end of a collection of estimates receiving attention in the media at the beginning of 2005. In February 2005 a British physician, Jan Coebergh, noted the absence of violent deaths from the WHO survey and, drawing some simple inferences from the ADS, estimated in an article in *Parliamentary Brief* that the true death toll was nearer 300,000. [xliii] The scale of this estimate echoed the American activist-scholar Eric Reeves of Smith College who had been posting on the internet similarly large estimates based on parallel assumptions for some time.[xliv] Eric Reeves soon updated his work in a *Boston Globe* op ed piece, projecting a death toll of 400,000. The importance of Coebergh and Reeves' estimates is that they made explicit that their higher projections involved adding deaths resulting from violence recorded in the ADS work to the deaths mainly following from disease and malnutrition in the WHO survey. These estimates were attempts to bridge the crime and health paradigms.

At almost the same time, in conjunction with the Coalition of International Justice [CIJ], we issued a press release detailing an estimate based on a combination of the WHO and ADS surveys. The estimate involved going back through each of the 1136 ADS surveys and retracing all of the steps necessary to make this projection clearly and completely transparent. We concluded that as many as 350,000 persons might have died, and that nearly 400,000 persons were likely either missing or dead in Darfur. The *New York Times* and *Washington Post* now began reporting with some frequency an estimate of 300,000 deaths. Kofi Annan seemly endorsed the higher assessment when he indicated in a *New York Times* op ed piece that 300,000 "or more" Darfurians were thought to have died. [xlv] In April 2005, Marc Lacey cited our nearly

400,000 dead and missing figure for the first time in the *New York Times*.[xlvi] A consensus was emerging that hundreds of thousands had died, with the estimates now ranging from 180,000 to 400,000 deaths.

The Consensus Breaks

In the early spring of 2005, Assistant Secretary Robert Zoellick, the Deputy to the new Secretary of State, Condoleezza Rice, paid a personal visit to Darfur. Zoellick described himself as a mixture of an economist and a diplomat with an "accountancy past" that included service in the U.S. Treasury as well as State Departments. He later left the Bush Administration to join the Wall Street investment firm, Goldman Sachs, and today is President of the World Bank.[xlvii] Condoleezza Rice spoke to the press before his departure to Sudan to emphasize the importance she attached to the trip. So the press was attentive when Zoellick's visit produced a revised and highly unexpectedly upbeat assessment of events in Darfur.

In a press conference held in Khartoum with the first Vice President of Sundan, Ali Uthman Muhammad Taha, Zoellick startled reporters by declining to reaffirm Powell's earlier determination that a genocide had occurred in Darfur. When he was asked about the characterization of the conflict in Darfur as genocide, he answered that he did not want to "debate terminology." He went on to dispute the then prevailing consensus estimates of deaths that we have seen were all in the hundreds of thousands. Zoellick instead reported a new State Department estimate that as few as 60,000 and at most 146,000 "excess" deaths had occurred in Darfur. The State Department subsequently posted a new report on its web site, *Sudan: Death Toll in Darfur* , explaining that "violent deaths were widespread in the early stages of this conflict, but a successful, albeit delayed, humanitarian response and a moderate 2004

rainy season combined to suppress mortality rates by curtailing infectious disease outbreaks and substantial disruption of aid deliveries." [xlviii]

The State Department report was brief and did not report the sources or details about the surveys it used, as we note further below. When questions were raised about the incompleteness of the State Department report, it became apparent that much of the work on it was done in collaboration and by outsourcing with the Centre for Research on the Epidemiology of Disasters [CRED], a research program located within the School of Public Health of the Universite Catholique de Louvain in Brussels. This organization produced two reports respectively in May and December of 2005 titled "Darfur: Counting the Deaths (Method 1)" and "Darfur: Counting the Deaths (2)." There is much overlap between the State Department report and the CRED reports, including the joint participation of a State Department employee, Mark Phelan, and State Department funding. Both the State and CRED reports draw heavily from the population health paradigm.

For example, prominent concern about the estimation of "excess" deaths was a sign that the new State Department estimate and following CRED estimates were tilted toward the public health side of the disciplinary divide that we have emphasized, while simultaneously stepping away from its own victimization methodology. The more explicit sign of this shift was that the State Department had now chosen to exclude the results from its own ADS survey in its new estimate. This was a unique indication of the extent to which the new estimate was framed in the health paradigm of "complex humanitarian emergencies" rather than the war crimes context of genocide. The new estimates drew heavily on the WHO surveys and were based on the troubling assumption that the kind of survey work done by the WHO comprehensively measured the scale of mortality occurring in Darfur.

Yet it was already clear from public statements by the WHO's David Nabarro (discussed further below) that its survey was a partial picture of the death toll, since by the evidence of Nabarro's own carefully framed remarks, the WHO survey did not take into account those killed in the attacks on the Darfur villages that had provoked the flight to the displacement and refugee camps in the first place.

It may also be noteworthy, as we also explain further below, that the Zoellick visit came just a week after the United Nations had given the names of 51 persons identified by the U.N.'s Commission of Inquiry on Darfur to the International Criminal Court (ICC) for possible prosecution.[xlix] The list of suspects was known to include high ranking Sudanese government officials, perhaps even including Zoellick's Vice Presidential host at the press conference in Khartoum. This provides some background context to the press conference which Zoellick held with the Sudanese Vice President, where he announced the new estimate that as few as 63,000 and at most 146,000 "excess" persons were now believed to have perished in Darfur.

The immediate response to Zoellick's announcement of the State Department's new estimate was shock. The *American Prospect*'s Mark Goldberg called the State Department visit to Sudan "Zoellick's Appeasement Tour."[l] John Prendergrast, speaking for the International Crisis Group, summarized feelings in much of the NGO community, saying "for Zoellick to float 60,000 as a low end number is negligent criminally." He added that "it's a deliberate effort by the Bush administration to downplay the severity of the crisis in order to reduce the urgency of an additional response. I find that to be disingenuous and perhaps murderous."[li] Prendergrast, who served as a National Security Council official in the Clinton Administration, also indicated a motivation for the low estimate, saying "we have not taken adequate measures given the enormity of the crimes because we don't want to directly confront

Sudan when it is cooperating on terrorism."

Nonetheless, the State Department's new estimate had an apparently intended effect on major media news outlets. Whereas these sources previously were regularly reporting *hundreds of thousands* of deaths in Darfur, the widely reported death toll now shrunk to *tens of thousands*. Major mainstream news services– including Reuters, United Press International, and the British Broadcasting Service– now included the tens of thousands framing of the conflict as a stock phrase in their new stories, a practice that would continue for more than a year following. A picture soon began to emerge of why the State Department's Robert Zoellick had shifted its framing of the conflict in Darfur, and it supported Prendergrast's speculation about the Bush Administration's war on terrorism.

The Osama Bin Laden Connection

Within a week of Zoellick's return to Washington, The *Los Angeles Times* reported that just prior to Zoellick offering his new mortality assessment in Khartoum, the CIA had provided a jet to bring the Sudanese government intelligence chief, Major General Salah Abdallah Gosh, to Washington. The purpose of the visit was apparently to elicit information in the war on terror. The *L.A. Times* quoted State Department sources as attesting to the importance of Sudanese cooperation. These sources highlighted Sudan's role in the early 1990s in providing sanctuary to Osama Bin Laden and a base for Al Qaeda operations. Sudan's General Gosh now was quoted as saying "we have a strong partnership with the CIA." Gosh had been an official "minder" of Ben Laden during his time in Darfur.[lii]

The *New York Times* reported that the CIA flew Gosh from Khartoum to Baltimore-Washington International Airport on April 17, returning him to Khartoum on April 22,

making Gosh's trip coincide with Zoellick's stay in Sudan. [liii] The *Los Angeles Times* reported Gosh met in Washington with CIA officials on April 21 and 22. Zoellick arrived in Sudan on April 14 and his low mortality estimate was reported in the *Washington Post* on April 22. As chief of Sudan's intelligence and security service, observers have frequently charged that Gosh directed or at least knew of the role of the Sudanese military in the attacks on Darfur villages. Gosh's name is prominately positioned in the Sudanese government chain of command described in the following chapter. A follow-up *L.A. Times* story indicated that the Justice and State Departments were at odds over Gosh's Washington visit, with some in Justice suggesting that the trip should have more appropriately been an opportunity to detain a suspected war criminal.[liv] Gosh met during the visit with Porter Goss, the Bush Administration C.I.A. chief who later resigned amidst allegations and prosecutions of bribes and government contracts.

The suggestion that Sudan's General Gosh is a suspected war criminal is not new, and responsibility for his protective treatment extends beyond the United States. Alex de Waal writes that "the real power in Khartoum is not President Bashir, who is a pious, tough soldier, but a cabal of security officers who have run both the Sudanese Islamist movement and the Sudanese state as a private but collegial enterprise for the last 15 years .... And the members of this cabal are serial war criminals."[lv] General Gosh, as Sudan's national security chief, was cited by Congress in 2004 as having played a key role in orchestrating the Darfur genocide.[lvi]

Yet the Bush administration saw Gosh as potentially useful in its war on terrorism and in May 2004 had removed Sudan from its list of countries not cooperating in counterterrorism. The trip for Gosh to Washington by private CIA chartered jet during Deputy Secretary Zoellick's trip to Khartoum seemed intended to reward his past cooperation in providing information and to

encourage the possibility of future assistance. The *Los Angeles Times* has continued to report on the links between the CIA and Sudan's security service, called the Mukhabarat, noting that "Gosh has not returned to Washington since, but a former official said that 'there are liaison visits every day' between the CIA and the Mukhabarat." [lvii] The U.S. State Department recently issued a report calling Sudan a "strong partner in the war on terror."

It seems likely the reduced mortality estimate in Darfur and the temporarily suspended references to genocide were part the cooperative strategy. President Bush did not mention the genocide in Darfur for a period of more than four months in 2005. In May 2005, the columnist Nicholas Kristof wrote that, "today marks Day 141 of Mr. Bush's silence on the genocide, for he hasn't let the word Darfur slip past his lips publically since January 10 (even that was a passing reference with no condemnation)." [lviii] This is the period that the State Department reduced its Darfur mortality estimate and brought Sudan's General Gosh to Washington. The nonpartisan Congressional Research Service indicates that although Gosh and other Sudanese officials played "key roles in directing ... attacks against civilians," the administration was "concerned that going after these individuals could disrupt cooperation on counter-terrorism."[lix] This was actually a return to a recurring policy dating at least to the first Bush Administration when it is also reported that "Washington bureaucrats turned a blind eye towards the policy of the authorities in Khartoum, mainly in the hope of securing their support for American goals in the Middle East. [lx]

Gosh's visit to Washington apparently reaped benefits both for Sudan and for himself. Sudan subsequently was allowed to enter into a $530,000 public relations contract with a Washington based lobbying firm, C/L International. The public relations aspect of this contract seems to parallel the role of the European Sudanese Public Affairs Council that brought the

complaint against Save Darfur discussed as the outset of this article. In the U.S., such activity was in violation of Executive Order 13067 which prohibits American companies and citizens from doing business with Sudan.[lxi] Congress forced an end to this deal in February 2006. Still, Sudanese Foreign Minister Mustafa Osman Ismail was also allowed to meet with Secretary Rice in Washington and was promised a review of economic sanctions, while Deputy Secretary Zoellick attended Sudan's presidential inauguration.

Most important, however, is the issue of General Gosh and his success in evading personal sanctions. It is reported that Gosh is ranked number two on the widely leaked U.N. list of senior Sudanese officials blamed for allowing if not directing the ethnic cleansing in Darfur by the janjaweed militias he is accused of controlling. Nonetheless, Gosh also was able to visit London and meet with British officials.[lxii] One year after Gosh's visit to Washington and Zoellick's announcement of his low estimate in Khartoum, the U.N. belatedly imposed sanctions on four men for Darfur war crimes, but the most highly ranked and only government official was a Sudanese Air Force officer.[lxiii] A senior State Department official, Donald Steinberg, explained that our interests, "cut on the side of not offending the regime in Khartoum." The Bush administration pushed to keep Gosh off the list.[lxiv]

State's New View of Death in Darfur

To alter its perspective and reframe the killing in Darfur, the State Department had to reorganize its survey research by shifting attention away from its own Bureau of Democracy, Human Rights and Labor and Bureau of Intelligence and Research. These two bureaus had worked together to produce the State Department/CIJ survey of Darfur refugees in Chad and the earlier noted report, *Documenting Atrocities in Darfur*. The State Department shifted its focus

by outsourcing a reanalysis to the research group in Brussels noted above. Working with a new liaison person, Mark Phelan, and with funding from State's Bureau of Population, Refugees and Migration, and using surveys done outside the Department, the Brussels group reported the background details of the new low estimate that Deputy Secretary Zoellick had announced more than a month earlier in Khartoum. Again, this report does not provide the full details on the primary source surveys it relied upon .[lxv]

On the Sunday following his Khartoum announcement, the *Washington Post* had reproached Zoellick about the validity of his mortality estimate in an editorial titled "Darfur's Real Death Toll." The *Post* insisted that "the 60,000 number that Mr. Zoellick cited as low-but-possible is actually low-and-impossible" and concluded that "next time he should cite better numbers." The editorial cited the more than 400,000 State Department/CIJ estimate of deaths to make its point.[lxvi]

Zoellick took the unusual step of responding with a letter of protest to the *Post* in which he defended his actions and referred by implication to parallel disputes involving charges that Administration officials invented and stretched intelligence, in this case scientific surveys, to support policy preferences.[lxvii] The description of the population based survey mortality estimates as "intelligence" was unusual, but perhaps understandable when viewed in conjunction with the Washington visit of the Sudanese security and intelligence minister, General Gosh. Zoellick protested in his letter that,

> I did not invent intelligence or stretch it. I did not recommend that the analysts change their assessment. I did indicate that estimates varied widely and that many were higher. Our estimate was based on more than 30 health and mortality surveys by public health professionals, and it was corroborated by a World Health Organization research center.

To support Zoellick's claim, the State Department had previously posted on its web site the earlier, very brief report with uncited sources, *Sudan: Death Toll in Darfur*.[lxviii]

The corroborative role of the WHO affiliated research center is more fully revealed in the outsourced report from the Brussels group introduced above, but here the WHO's own characterization of this and the later Brussels "multiple survey" analysis is notable. A late May 2005 protocol from WHO concluded that "even if, overall, the findings of these surveys are consistent in showing broad spatial and time trends, they cannot be directly compared or combined in a meta-analysis due to differences in the study populations or methods utilized." A follow-up *Washington Post* article quoted a "senior State Department official" as saying that the report was "less scientific than you would think." [lxix] The public health specialist newly involved from the State Department, Mark Phelan, has an extensive background of research experience in public health and nutrition surveys.

Why was the State Department now relying on a review involving a health and nutrition expert and based on uncited sources that reported results substantively at odds with its earlier report issued under Colin Powell? What were the unreferenced sources and what could they tell us about death in Darfur during this continuing lethal conflict? How could scientific studies of such a lethal and protracted conflict produce such different conclusions? What can this experience tell us about the place of criminology in science and diplomacy? And what was the role of the Government Accountability Office in assessing the results of these events? The answers to these questions may not definitively tell us whether outsourced scientific research in this episode was, to use Zoellick's words, "invented or stretched intelligence", but the answers do help to reveal the ways in which scientific research can flip-flop in response to demands of diplomacy, in this case involving a denial of the deaths of many Darfurians.

Reexamining the Surveys

The answers again involve the health and crime perspectives applied in surveying the events in Darfur. The tension between these approaches is apparent from the outset of the outsourced CRED report. In a broadside against the State Department's ADS work from the previous summer (i.e., the survey that was the foundation of Colin Powell's testimony about genocide to the U.N. and U.S. Congress), the CRED report complains that "these interviews ... were not designed in any way to function as a mortality survey nor was there an overall systematic sampling methodology used that could make it representative of the roughly 200,000 refugees that fled to eastern Chad, much less of the entire 2.4 million people affected of Darfur."[lxx] Yet the survey applied a probability sampling methodology we described above (based on a random one in 10 household selection in all 19 identified Chad camps and settlements) and that is explicitly described in the State Department's own *Documenting Atrocities in Darfur* publication.[lxxi] To the extent the CRED sampling argument had force, it was an argument about sample selection bias involving the refugees over-representation of victimization in areas close to the Chad border. Yet there is much evidence in accounts of the Darfur conflict that similar methods of attack and victimization occurred across all three Darfur states, and the approximately the same numbers of persons (about one million each) were displaced in each of these states.

Why was the CRED so focused on sampling issues? The answer at least partly involves the criminal victimization (as contrasted with public health) approach followed in the earlier State Department/CIJ work. Despite the common social and political causes of the health and crime dimensions of such humanitarian emergencies, we have noted that epidemiologists and

demographers are inclined to focus mainly on the health outcomes, [lxxii] whereas criminologists prioritize issues of legal responsibility. [lxxiii] As we have noted, a common sequence in these emergencies involves the onset of violent attacks, the flight of the resulting victims, and ensuing health problems that all contribute to mortality. The challenge is to simultaneously keep in mind the cumulative and multiplicative effects of violence, flight, and displacement to concentrated encampments, and the political state and nonstate origins of these disastrous consequences.[lxxiv] Surely the substantive issue of including measurement of pre- and post-camp deaths involving violence as well as disease and malnutrition dwarf plausible concerns about sample selection bias. Furthermore, we addressed the issue of potential sample selection bias with supportive results by using only internal Sudan displacement camp surveys in an alternative estimate described below.

Meanwhile, we originally were concerned that the WHO survey work underestimated mortality in Darfur by ignoring almost all of the pre-camp killing that led survivors to flee to the camps. Yet we also were concerned when we undertook our own combined estimation that the ADS work could exaggerate Darfur mortality due to the pre-camp violence by including multiple family members' overlapping reports of the same killings. Stephanie Frease of the Coalition for International Justice had acknowledged this point by noting in an early report of the ADS results that "refugees included extended family– such as uncles and cousins– in their answers."[lxxv]

To address this problem, we further examined each of these 1136 surveys from the ADS to establish that during the 17 month period covered, 360 persons *specifically identified as husbands, wives, sons and daughters* were reported as dead or missing and presumed dead. Unless there was a specific reference in the original interview to the death involving a nuclear

family member, the death was not included in the 360 total. This requirement of explicit nuclear family membership was invoked to eliminate overlapping, duplicate reports of deaths by extended family members. The count of 360 dead or missing persons formed the basis for the calculation of a CMR of 1.2 deaths per 10,000 people per day, or more than 98,000 persons presumed dead for the first 18 months of the conflict. Note that this figure exceeds by more than 50 percent the low estimate reported by Zoellick, even though it does not cover the full period of the conflict and does not include deaths from malnutrition and sickness in the camps, which was the focus of the WHO survey cited above. How could there be such a large disparity on such a fundamental matter of life and death?

From a criminological perspective, the key lies in the difference between the Powell State Department's criminal victimization survey methodology and the studies done for health focused organizations in Darfur. Recall that while Powell wanted to testify on the basis of reliable evidence about the genocidal killing that led Darfurians to flee their villages and seek refuge in camps, the public health organizations worked with a different purpose. These organizations subsequently needed to work with and for those living in the camps to stop them from dying of starvation and disease. Population surveys of mortality, morbidity and nutrition are undertaken by these public health organizations to establish the health risks posed in camp settings by starvation and disease. As we have emphasized, these organizations- such as the World Health Organization, the World Food Program, and the Center for Disease Control and Prevention- are more concerned with these immediate and ongoing risks than they are with the past violence that leads refugees to camps. This is why Powell needed his own victimization survey to substantiate his Congressional testimony about genocide.

The survey work was undertaken by the State Department through the Coalition for

International Justice in the Chad refugee camps because the Sudanese government would not allow this kind of violence based investigation to be broadly undertaken within its national borders. Instead, as noted in the previous chapter, the Sudanese government wanted to blame the deaths in Darfur on problems of health and nutrition that the international health organizations had failed to overcome and control. [lxxvi] The State Department therefore adopted its own alternative victimization survey methodology. Since the refugees in the Chad camps had fled from Darfur, they could provide through their retrospective accounts a window on the violence in the homes and villages they left behind. This kind of indirect estimation approach is increasingly used by demographers, for example, to inquire through surveys of North Koreans who take refuge across the border in China about their family history of nutrition and health problems, including those among siblings remaining behind the closed North Korean boundary.[lxxvii]

Parallel differences between crime and health surveys are reflected in much of the respective research of other organizations undertaken in studies that have produced distinctively different death estimates for Darfur. Much of the resulting confusion and debate in the case of Darfur goes back to the WHO mortality survey noted early in this chapter as the source of the seven month estimate of 70,000 deaths. We noted that this survey was conducted at about the same time as the State Department/CIJ survey in Chad, in late summer of 2004; but the WHO survey was done inside Darfur and jointly conducted with the Sudanese Ministry of Health [henceforth WHO/SMH], as a health rather than a legally oriented crime victimization survey.

The different foci of the State Department/CIJ and WHO/SMH studies can be seen as complimentary, but the confusion of their separate criminal law and health purposes has led in

the State Department's recent reports to the flip flop in conclusions. David Nabarro of WHO attempted to forestall this outcome in October of 2004 when he posted his report of the seven month 70,000 death estimate. He explicitly stated that "these projections have not sought to detail deaths due to violent incidents within Darfur communities."[lxxviii] The CNN coverage of Nabarro's press conference took note of this in indicating that "the figure does not take into account deaths from direct violence in the conflict-torn region."[lxxix]

This would seem to be a clearly understood statement about the WHO/SMH survey, but as recently as February 23 2005 the British Secretary of State, Hilary Benn, testified to the Parliamentary International Development Committee that "it is my best information that the WHO estimate for the period March to October ... 2004 did include deaths from injuries and from violence."[lxxx] Later in the same hearing the Member of Parliament who raised the issue reported that "I am since told that the Committee has been advised by the WHO that that 70,000 does not include deaths due to the violence from which people have fled, which is obviously the vast bulk of the violence, it includes only that violence which has come about through fights over the distribution and allocation of food within the IDP camps."[lxxxi] Secretary Benn wrote further to the Committee on 14 March of 2005 to clarify her view with regard to the WHO/SMH survey that "it is not possible to calculate with confidence the number of deaths directly related to the conflict."[lxxxii] The Committee felt strongly enough on this matter to present in bold print the statement in its final report at the end of March 2005 that "the only violent deaths which the WHO's estimate includes are those which took place in the camps for Internally Displaced Persons (IDPs) .... Cited without clear explanation of its limitations, the WHO's estimate is extremely misleading."[lxxxiii]

This might seem to have definitively resolved this issue, yet the issue arises again in the

late May 2005 report from the Brussels group that provides further insight into Zoellick's low State Department estimate. The Brussels report, co-authored with the State Department's Mark Phelan, now asserted that "the WHO mortality survey and the WHO mortality projections have often been confused and misguidedly used interchangeably. This has led some to misinterpret a WHO statement indicating exclusion of violent death from the WHO estimate, as also meaning violent deaths were not included in the WHO mortality surveys." [lxxxiv] Yet the point earlier made by the WHO's David Nabarro and the British Parliamentary Committee is that the violent deaths picked up in the WHO/SMH survey represented less common violent mortality in and around the camps rather than the widespread deaths from attacks on the villages that led individuals to flee to the camps.

There are several ways to demonstrate this crucial point of difference between the State Department/CIJ and WHO/SMH surveys. First, there are few deaths due to "injury and violence" reported in the WHO/SMH survey (less than 15% overall), while all of the deaths in the State Department/CIJ survey are directly or indirectly due to violence (in the village attacks or on the journey to the camps). Second, the majority of deaths by violence in the State Department/CIJ survey are of persons between 15 and 49 years of age, while in the WHO/SMH survey the majority of those who died from injury or violence are over 50 years of age, suggesting the latter deaths may include accidents and injuries among the elderly. Third, while the period covered by the WHO/SMH survey was restricted to the prior two months in the summer of 2004, the average person in an IDP camp had been there for six or more months. This last two month restriction of the WHO/SMH survey, which we again emphasize was jointly conducted with Sudanese government consent and cooperation, is a key way in which the study was prevented from providing evidence of the violent origins of the genocide. The need to

collect this otherwise unavailable evidence was the specific purpose of the State Department/CIJ survey.

A Complimentary and Combined Approach

Viewed more constructively, the division of labor between the pre- and in camp experience in the State Department/CIJ and WHO/SMH surveys between the pre- and in camp experiences makes their results potentially complimentary. The WHO/SMH survey is especially useful in indicating the health and nutrition related deaths in the Darfur IDP camps in the late summer of 2004, while the State Department/CIJ surveys informs us about the violent deaths from attacks leading victims and their families to seek sanctuary in Chad refugee camps for the preceding 17 months. These two different surveys can be brought together to better inform us about mortality due to health *and* violence in Darfur.

Our approach involves doing a simple recalculation with the combined surveys. We noted earlier that a CMR of 2.14 is reported for North and West Darfur in the WHO/SMH survey (with South Darfur less fully surveyed). Given the discussion above, we take this survey as providing a meaningful estimate of mortality following displacement due to causes in and around the camps, but excluding deaths due to violent attacks prior to displacement. To complete the picture of Darfur mortality, we can simply add the WHO/SMH estimate to the State Department/CIJ survey crude mortality rate due to violence and flight, which is 1.2, yielding a combined estimate of 3.34.

We argued in the previous chapter that it is dubious in terms of legal responsibility to accept any of this mortality as "expected" or "normal." Nonetheless, we also noted that it can be useful to make comparisons to prior levels of mortality to provide a sense of the elevated scale of

the humanitarian crisis involved. Since the "normal" mortality rate conventionally is estimated from .35 to .5 (per 10,000 per day) in a sub-Saharan African country with the demographic characteristics of Sudan, it is reasonable to conclude that the rate of violence and health related death in Darfur for the affected period of 2003/4 exceeded expectations by a multiple of six or more. This rate of death is consistent with deaths of up to 15,000 or more Darfurians a month at the peak of the genocide.

It is uncertain how long the monthly death toll persisted at this elevated level, but the overall conflict in Darfur has been ongoing for more than three years. Recall that the WHO projection was 10,000 deaths per month. The 15,000 estimate we have just presented implies that the WHO/SMH estimate was low, but recall also that Jan Egeland of the U.N. extrapolated this figure over 18 months, a period that is almost certainly longer than the peak in mortality, even if this mortality was prolonged and sustained. In this sense, the WHO projection may have been both to low and too long, with consequences that are to some extent off-setting.

We introduce a final estimation approach in the following section of this chapter that takes into account monthly variation in the mortality. Our calculations to this point suggest that it is much more likely that the Darfur death toll is between 200,000 and 400,000 than between the 63,000 to 146,000 new estimate of Zoelick's State Department. As noted earlier, this amounts to the difference between tens and hundreds of thousands of deaths. The tens of thousands estimate held sway in much of the media for more than a year after the new State Department estimate. So where does the latter low number come from?

The Unaccountability of the Government Accountability Office

The answer involves the other surveys which the CRED group and Mark Phelan of the State Department incorporated to generate the low estimates that led to the lower bound report of 63,000 deaths. European based CRED, the U.S. State Department, and ultimately the U.S. Government Accountability Office made extensive use of health and nutrition surveys. Establishing the extent to which this is the case is difficult because CRED and State do not clearly identify the surveys they use in their estimates. While full referencing and citation of survey sources would seem among the most fundamental of scholarly research norms, the U.S. Government Accountability Office [henceforth, GAO] takes an unusually relaxed view of this norm in its report on the *Darfur Crisis*.

This problem is apparent from the very outset of the GAO's work. In a cover letter submitted to the ranking members of the House and Senate committees that commissioned the GAO review, the authors report the following internally contradictory information about their methods and deliberations:

> To evaluate the estimates, we reviewed and analyzed public information on the estimates and interviewed the estimate authors regarding their studies' data, methods and objectives. We provided this information and summaries of the interviews to a group of 12 experts in epidemiology, demography, statistics, and the Darfur crisis convened in April 2006 in collaboration with the National Academy of Sciences. These experts discussed their review of this information and evaluation of the estimates during an all-day session and also assessed the estimates in a follow-up survey. State's Bureau of Intelligence and Research, which conducted the department's death estimate for Darfur, declined to speak with us or provide additional information, limiting the expert's ability to fully understand State's methods of analysis. However, despite this limitation, the

experts were able to discuss State's estimate in detail and assess its accuracy and methodologies.[lxxxv]

It is unclear how the reported refusal of the State Department to provide or discuss missing and omitted information is consistent with the claim that the committee could review State's estimate in "detail," much less "in accordance with generally accepted government auditing standards." Note also that none of the 12 experts is described as having expertise in the crime victimization paradigm.

This situation is not improved when in its following presentation of "Results in Brief" the GAO report indicates that "many experts believed that the lower end of State's estimate was too low and found that published documents describing State's estimate lacked sufficient information about its data and methods to allow it to be replicated and verified by external researchers."[lxxxvi] The review later notes that nine of the 10 experts rated the lower-end of State's estimate as too low.[lxxxvii]

Overall, the GAO review "did not rate any of the death estimates as having a high level of accuracy and noted that all of the studies had methodological strengths and shortcomings." The review did observe that "in reviewing the estimates, we found we were able to replicate Dr. Hagan's entire estimate based on its description in public documents."[lxxxviii] Nonetheless, the experts indicated greatest confidence in the lower estimates of mortality in Darfur, and lower confidence in the higher estimates, including my estimate. The experts ranked the CRED estimate the highest, while giving State's estimate "slightly lower ratings for accuracy and methodological strengths."[lxxxix] As noted earlier, the CRED and State estimates were linked, with State funding CRED and the State Department author, Mark Phelan, overlapping on the reports.

It is perhaps not surprising that some of the same basic problems with the State Department estimate reappear in the CRED reports, especially the problem of missing and omitted primary sources and incomplete information about how the CRED estimates were constructed. Thus, "several experts found shortcomings in the CRED estimates' data and methods and thought that CRED could have provided more information and clarity in its reporting"[xc] and "several experts believed that better descriptions of the methods used, including information on specific formulations and calculations, could have been provided."[xci] A page later, the report offers similar observations about the parallel State Department estimate:

> Some experts said that several of the mortality surveys used in State's estimate may have had methodological limitations in areas such as survey design, implementation, or accessibility to insecure regions, resulting in unrealistically low mortality rates. These experts believed that such limitations in source data, in addition to other problems - for example, the estimate's lack of clarity regarding how missing populations are accounted for and use of a relatively higher baseline mortality rate - may have pulled down State's estimate, in particular, its lower end.[xcii]

The GAO review then offers a summary statement that seems in direct contradiction with its opening letter to the House and Senate committees. Thus on the issue of the "sufficiency of reporting," the GAO review reports that "many of the experts found that the published documents containing State's estimate lacked sufficient information to allow them to replicate the estimate and verify the accuracy and reliability of the data and methods."[xciii] Similarly, "in our review of CRED's first estimate, we were able to replicate it to some degree only after the authors provided a substantial amount of information, such as specific

mortality rates and formulas used and citations for source studies, in addition to the information in the published document."

The authors of the GAO review also offer the startling conclusion, given their high rating of the State estimate, that "our review of the State estimate also showed that it could not be replicated with the information contained in the report." [xciv] It comes as little surprise, then, that the GAO review underlined in its recommendations that information about sources and methods should be provided in future work. Despite its claim that it could provide detailed assessments of CRED and State's estimates, and its expression of confidence in these estimates, the GAO offered that "the measure rated most likely to produce the most improvements was ensuring sufficient public documentation of estimates' data and methods to allow replication of the methods, verification of the findings, and confirmation of the estimates' credibility and objectivity." The inference was that although the experts did not know the sources of State and CRED's estimates or the methods and the calculations performed on them, they still were confident about them.

So what are the primary sources that State and CRED so incompletely report? Probably the most extensively used of these other surveys is a study jointly undertaken by the U.S. Centers for Disease Control and Prevention (CDC) and United Nations World Food Programme (WFP), again in the summer of 2004 and with the co-authorship of Mark Phelan.[xcv] The title of the aforementioned study, "Emergency Nutrition Assessment of Crisis Affected Populations, Darfur Region, Sudan," is significant in relation to the division of labor we have emphasized between crime victimization and health research. Just as the WHO/SMH study was designed to reflect mortality in the displacement camps from health problems, the CDC/WFP survey was designed to reveal nutritional problems.

Comparison of figures in the CRED report reveals that the low estimate of deaths by Zoellick in Darfur is dependent on this kind of CDC/WFP nutritional survey, which produced low mortality estimates. However, consider the following: the recall period for this survey was only six months (while among those who were in displacement camps the average duration of stay was 7.5 months), the cause of death was not indicated among nearly half of those who were reported dead in this survey (while among all those indicated as dead only 16 percent reported "violent injury" as the cause), and these deaths were mostly among older respondents.

The point is that the nutritional studies are a source of likely downward bias in determining the low estimates of the genocide in Darfur. There are further reasons to doubt the validity and purposes of Zoellick's low State Department estimates, including a refusal to meaningfully consider missing persons in these estimates. Yet rather than belabor these further divergences in crime victimization and health orientations to the death count, it is more constructive to present a final mortality estimate from Darfur that we designed to bridge the crime and health divide by including measures of both violence and health related deaths.

The following alternative approach was inexplicably not considered, even though it was published as an article co-authored with Alberto Palloni, a recent President of the Population Association of America, in the journal *Science* two months (September 2006) before the GAO report was completed (November 2006). This is the only peer reviewed estimate of Darfur mortality published in a scholarly journal, and *Science* is one of the most highly regarded journals in the world. The GAO insisted that it did not receive this estimate in time for the report, yet it makes reference to the study in the report, and it was received by GAO even before its publication. I suspect that the reasons this estimate was not considered in the review was that

it challenged key assumptions of the population health paradigm and posed further questions about the State Department estimate.

One source of evidence for my suspicion about the unwillingness of the GAO to further address its basic population health assumptions involves its unresolved response to the issue of "normal" and "excess" mortality. The GAO review leaves this issue this way:

> In addition, the experts debated whether a baseline of any sort was justified for a humanitarian crisis such as Darfur, arguing ethical and philosophical, rather than technical, considerations. About half of the experts said that deaths that would have occurred regardless of the crisis should be subtracted from the death toll attributed to the crisis. However, two experts took a contrary position, arguing that the concept of expected or normal levels of mortality was not appropriate in the presence of genocide or ethnic cleansing because the perpetrators of those crimes against humanity should be considered culpable for all deaths that resulted from the crises they instigated. Using a baseline to estimate mortality would lead to a somewhat smaller excess death toll than not using a baseline. For example, State's estimate of total deaths ranged from 98,000 to 181,000, minus 35,000 expected deaths; thus, State's estimated 63,000 to 146,000 excess deaths directly resulting from the crisis. [xcvi]

This passage makes clear how important the debatable population health practice of removing "excess mortality" is to State having a low end estimate of mortality in the tens rather than hundreds of thousands of deaths. The polemical significance of this low estimate is further addressed below.

A New and Alternative Approach

Because the estimation of the death toll has been such a source of controversy and is widely believed to be central to a genocide charge, we decided to develop an alternative approach to this estimation that did not rely on the State Department ADS work and instead took advantage of a unique study which bridged the concerns of the crime and health perspectives. This study was led by Medecins Sans Frontieres (MSF) [xcvii] and published in the journal of medical research *Lancet* in October 2004.[xcviii] The study was conducted in only five displacement camps in West Darfur between April and June, 2004, with recall periods from one to six months between October and June 2004, probably the period of highest violence in Darfur. In retrospect, the limitation of sites is easy to understand: the Sudanese government would not authorize the scale of sampling required across many sites to representatively study the wide ranging violence in Darfur.

As in the larger WHO/SMH study, MSF found within camp violence accounting for only six to 21 percent of the deaths across the several camps. But the MSF study also asked about the period leading to flight to four of the five camps. Nearly 90 percent of these deaths resulted from violence. In these camps, the village and flight CMRs (5.9-9.5) were much higher than the camp CMRs (1.2-1.3). Heavy rains and worsening camp conditions subsequently increased the camp mortality rates in the WHO/SMH study reported above; and a further camp studied by MSF already had a mortality rate heading into this period of 5.6. Overall, the average mortality rate across the four MSF camps- with pre-camp violence included in three of the camps- was 3.2. Note that this combined rate is approximately the same level of mortality we estimated above with the joined State Department/CIJ and WHO/SMH studies.

Still, we concluded that it would be more persuasive to develop a new and alternative estimate that estimated mortality in Darfur on a month by month basis and that took advantage of

the different time periods included in the MSF camp surveys. The MSF surveys use essentially the same sampling design as the WHO/SMH survey, although the former are limited to five camps in the state of West Darfur, while WHO/SMH surveyed camps in North and South Darfur as well. Both the MSF and WHO/SMH surveys report age-specific CMRs and some information on violence, although we have emphasized that the MSF surveys systematically included pre-camp as well as in-camp mortality. The strongest feature of the WHO surveys is the number of camps included, while the strongest feature of the MSF surveys is the coverage of pre- and in-camp mortality. We combine the MSF and WHO/SMH surveys to draw on the strengths of both in our new estimate. We narrow the focus initially to 19 months of the conflict and the state of West Darfur, and later draw broader conclusions. The risk population for corresponding months is taken from the U.N. humanitarian profiles of people counted in the internal displacement camps and people surrounding the camps who together constitute what the U.N. calls "conflict-affected persons." We include U.N. refugee camp counts in Chad to complete the estimate of the population at risk.

Our new estimate involves calculations of direct and indirect monthly estimates of CMRs to better take into account sources of over and under-reporting of deaths. The premise is that if we have two estimations with contrasting upward and downward biases, then we can look for a more realistic estimate of the actual death toll in the space in between these upper and lower bound projections.

The direct estimation method is based on CMRs that are calculated for all age groups in the surveys. Earlier in this chapter we noted our concern that respondents could use extended definitions of their families to include grandparents, uncles, aunts, cousins and even more distant relatives in their reports of deaths. Put differently, these directly reported CMRs for family

members of all ages likely are upwardly biased by reports of deaths of extended as well as nuclear family members, because kinship boundaries often expand and become more inclusive in response to war.

The indirect estimation method we use is alternatively based on CMRs that are calculated for only family members under five years of age. We expected that these reports are less likely to include extended family members because respondents are focused in a more narrow way when they are asked about their own children. [On the other hand, there is a different source of survivor bias involved in under-reporting for this age group. These reports are likely downwardly biased by missing children whose entire unrepresented families have died.] Life tables for sub-Saharan Africa are used to estimate the full age distribution of mortality in peacetime, and violence is then reincorporated into the estimate on the basis of the proportion of violence reported in the surveys.

The overall rise and decline in estimated deaths in West Darfur is consistent with the classical pattern of complex humanitarian emergencies discussed in the previous chapter. Perhaps most interestingly, the peak mid-point monthly level of deaths estimated for West Darfur is about 4000. Below we will argue that there is good reason to believe that deaths are distributed approximately evenly across the three Darfur states. If this is so, the estimate is that the death toll in Darfur peaked in early 2004 at about 12,000 per month. Note that this figure is between the 10,000 estimate of WHOSMH and our earlier 15,000 estimate that combined the findings of WHO and ADS. This 12,000 peak monthly death estimate does not include missing persons and is intended to provide a cautious baseline figure.

We can also now say something more specifically about the 19 months that are best surveyed in West Darfur in 2003-4, and then suggest some broader conclusions. When the

mid-points between the high and low monthly death estimates are summed over 19 months, the number of deaths is 49,288. When the right tail of this distribution is extended to May 2006 using additional data from a subsequent WHOSMH survey, the death toll is 65,296 in West Darfur alone. This estimate covers 31 months of the conflict that has now been underway more than four years. If a further 20 months of conflict were well estimated, and/or if all or most missing or disappeared persons were presumed dead, the death estimate would be much higher.

Largely as a result of the violence, more than one million individuals are now displaced or affected in West Darfur. About one million people are similarly displaced in each of the adjoining states of North and South Darfur. If the same ratio of death to displacement applies across states, this implies that close to 200,000 deaths have occurred over 31 months in Greater Darfur. This calculation divides the difference between the potential upwards and downward biases of the the direct and indirect methods. If the high direct and low indirect bands of estimates are extended across the three states for 31 months, the range is between 170,000 and 255,000 deaths. So it is likely that the number of deaths for this conflict in Greater Darfur is higher than 200,000 individuals. If extended for the further 20 months and to include the missing disappeared, the number is likely between 300,000 and 400,000 deaths.

Some Conclusions

Our Science article was intended to establish a "floor" estimate of Darfur deaths that no reputable news source would go below. The State Department's April 2005 estimate of as few as 63,000 deaths had led the major international news organizations, such as Reuters and the BBC, to downgrade their reports to tens of thousands of deaths in Darfur following earlier reports of hundreds of thousands of deaths. In November of 2006, the GAO did not help matters by

vaguely concluding that "many thousands of civilians died in Darfur between February 2003 and August 2005."[xcix] This was a number that sounded uncomfortably consistent with Sudan President Al-Bashir's report of 10,000 deaths.

Why the low State Department and GAO estimates? Colin Powell had called Darfur a genocide in September of 2004. However, in April of 2005, the Deputy Secretary of State traveled to Khartoum to announce the State estimate that the death toll could be as low as 63,000. He also refused in the same news conference to use the genocide term or to confirm that a genocide had occurred, even though this was Powell's State Department determination. We have noted that this was the same week in which the Los Angeles Times and New York Times both reported that a Sudanese security chief, a General Gosh, was flown by private jet to Washington. He met with CIA officials about intelligence in the war on terror.

Some have speculated there was a link between the low Darfur death toll estimate, the refusal to use the term genocide, and the exchange of intelligence. If this is so, it represents an escalation of the politicization of what the population health paradigm treats as "complex humanitarian emergencies." We have argued that the assumptions of this paradigm are understandable but also problematic and we argued for the relevance and importance of a parallel crime victimization approach. The consequences of considering an alternative approach are potentially important. Our Science article incorporates this approach and confirms what all responsible news organizations now regularly report: that more than 200,000 have died in genocidal violence in Darfur. This same article stresses that the death toll could be much higher - indeed as high as 400,000. This is in stark contrast with President Al-Bashir's recent downgrading of the toll to 9,000 deaths and his further observation that no rape occurs at all.

i Gerard Prunier, Darfur: The Ambiguous Genocide, 2005, Ithaca, Cornell University Press.
ii Paul Krugman, "Snow Job in the Desert," New York Times, September 3, 2007, p. A17.
iii David Herszenhorn, "Democrats, Promising to Force Change in War Strategy, Aim to Reframe Iraq Debate," New York Times, September 5, 2007, p. A10.
iv R. Waldman and G. Martone, "Public Health and Complex Emergencies: New Issues, New Conditions," American Journal of Public Health, 1999, Vol. 89, pp. 1483-1485.
v
C.B. Keely, H.E. Reed, and R.J. Waldman, "Understanding Mortality Patterns in Complex Humanitarian Emergencies," in H.E. Reed and C.B. Keely (eds.), Forced Migration and Mortality, 2001, Washington, D.C., National Academy Press.
vi UBC Report .....
vii E. Noji and M. Toole, "The Historical Development of Public Health Responses of Disasters," Disasters, 1997, Vol. 21, pp. 366-376.
viii B. Levi and V. Sidel, War and Public Health, 1967, New York, Oxford and E. Noji, The Public Health Consequences of Disasters, New York, Oxford University Press.
ix A.S. Natsios, U.S. Foreign Policy and the Four Horsemen of the Apocalypse: Humanitarian Relief in Complex Humanitarian Emergencies, 1997, Westport, Connecticut, Praeger/Centrer for Strategies of International Studies.
x C.B. Keely, H.E. Reed and R.J. Waldman, Understanding Mortality Patterns in Complex Humanitarian Emergencies, in H.E. Reed and C.B. Kelly, Forced Migration and Mortality, 2001, Washington: National Academy Press, pp. 1-37 and R. Waldman and G. Martone, "Public Health and Complex Emergencies: New Issues and New Conditions," American Journal of Public Health, Vol. 89, pp. 1483-1485.
xi M. Toole and R. Waldman, "Prevention of Excess Mortality in Refugee and Displaced Populations in Developing Countries," Journal of the American Medical Association, 1990, Vol. 263, pp. 3296-3302.
xii Ibid., at p. 3300.
xiii Ibid., at p. 3301.
xiv Ibid., at p. 3301.
xv M. Toole and R. Waldman, "Refugees and Displaced Persons: War, Hunger, and Public Health," Journal of the American Medical Association, 1993, Vol. 270, pp. 600-605.
xvi Ibid., at p. 605.
xvii B.T. Burkholder and M.J. Toole, "Evolution of Complex Disasters," Lancet, 1995, Vol. 346, pp. 1012-1015.
xviii P. Spiegel and P. Salama, "War and Mortality in Kosovo, 1998-1999: An Epidemiological Testimony," Lancet, 2000, Vol. 355, pp. 2204-2209.
xix Bureau of Refugee Programs, Assessment Manual for Refugee Emergencies, 1985, Washington, D.C., U. S. Department of State.
xx Center for Disease Control, Famine Affected, Refugee and Displaced Populations: Recommendations for Public Health Issues, MMWR Recommendations Report, 1992, Vol. 41 (RR-13), pp. 1-76.
xxi
I Timaeus and M. Jasseh, "Adult Mortality in Sub-Saharan Africa: Evidence from Demographic and Health Surveys," Demography, 2004, Vol. 41, pp. 757-772.
xxii International Rescue Committee, Mortality in the Democratic Republic of the Congo: Results from a Nationwide Survey, 2004, New York, International Rescue Committee.
xxiii Goma Epidemiological Group, "Public Health Impact of Rwandan Refugee Crisis: What Happened in Goma, Zaire in July 1994," 1995, Lancet, Vol. 345, pp. 339-344.
xxiv International Rescue Committee, op cit.
xxv F. Watson, I. Kulenovic, and J. Vespa, "Nutritional Status and Food Security: Winter Nutrition

Monitoring in Sarajevo, 1993-1994," European Journal of Clinical Nutrition, Vol. 49, pp. S23-32.
xxvi D. Rohde, Endgame: The Betrayal and Fall of Srebrenica, Euorpe's Worst Massacre Since World War II, 1997, New York, Farrar, Straus and Giroux.
xxvii R. Rogers and E. Copeland, Forced Migration: Policy Issues in the Post-Cold War World, 1993, Medford, Masschusetts, Tufts University Press.
xxviii Keely, Reed and, Waldman, op cit., at p. 12.
xxix See, for example, World Health Organization, Retrospective Mortality Survey Among the Internally Displaced Population, Greater Darfur, Sudan, 2004, Geneva, World Health Organization.
xxx Alex de Waal, Famine Crimes: Politics and the Disaster Relief Industry in Africa, 1997, Oxford, Currey.
xxxi A backdrop to these arguments is set in Alex de Waal, Famine that Kills: Darfur, Sudan, 1985, London, Oxford University Press.
xxxii House of Commons International Development Committee, Darfur, Sudan: The Responsibility to Protect, Fifth Report of the Session 2004-2005, Vol. II, Oral and Written Evidence, 2005, London, Station Office Limited.
xxxiii Ibid., at p. EV 50.
xxxiv Ibid., at p. EV 52.
xxxv Ibid., at p. EV 50.
xxxvi Ibid., at p. EV 52.
xxxvii Ibid., at p. EV 50.
xxxviii U.S. Department of State, Documenting Atrocities in Darfur, Human Rights and Labor and Bureau of Intelligence and Research, 2004, Washington, D.C., Bureau of Democracy.
xxxix
David Nabarro. Media Briefing Notes, UN Palais press corps, Geneva, "Mortality Projections for Darfur, 15 October 2004." Presented by David Nabarro, Representative of the World Health Organization Director-General.
xl Donald McNeil, "The Worrier: At the U.N.: This Virus Has an Expert 'Quite Scared,'" New York Times, 2006, March 28, p. D4.
xli Evelyn Leopold, "U.N. Envoy Says Deaths in Darfur Underestimated," 2005, March 10, Reuuters.
xlii Reuters, "Over 180,000 Darfur Deaths in 18 Months – U.N. Envoy," 2005, March 15.
xliii Coebergh, J. "Sudan: Genocide Has Killed More than Tsunami." Parliamentary Brief. Vol. 7. Pp. 5-6.
xliv Eric Reeves. "Darfur Mortality Update: June 30, 2005." Sudan Tribune. July 1, 2005.
xlv Koffi Annan. "Billions of Promises to Keep." April 13, 2005. New York Times. P. A29.
xlvi Marc Lacey, "Nobody Danced. No Drus. Just Fear. Some Holiday!" New York Times. April 22, 2005. P. A4.
xlvii Joel Brinkley, "A Diplomatic Lone Ranger with 3 x 5 Cards," New York Times, 2005, April 17, p. 10.
xlviii U.S. Department of State, op. cit., p. 1.
xlix Warren Hoge. "International War-Crimes Prosecutor Gets List of 51 Sudan Suspects." New York Times. April 6 2005. P. A6.
l Mark Goldberg. "Zoellick's Appeasement Tour." The American Prospect Online. April 29, 2005.
li Sue Pleming. "Aid Group Criticizes U.S. Policy on Sudan." Reuters. April 26, 2005.
lii Ken Silverstein. "Official Pariah Sudan Valuable to American War on Terror." Los Angeles Times. April 29, 2005. P. A1.
liii S. Shane. "C.I.A. Role in Visit of Sudan Intelligence Chief Causes Dispute Within Administration." New York Times. June 18, 2005. P. A7.
liv Ken Silverstein. "Sudanese Visitor Split U.S. Officials." Los Angeles Times. June 17, 2005.
lv Alex de Waal, "Tragedy in Darfur," Boston Review: A Political and Literary Forum,"

Http://www.bostonreview.net/BR29.5/dewaal.html. See also Julie Flint and Alex de Waal, Darfur: A Short History of a Long War, 2005, London: Zed Books.

lvi Marisa Katz, "A Very Long Engagement: Bush Channels Neville Chamberlain," The New Republic, May 15, 2006, p. 24.

lvii Greg Miller and Josh Meyer, "U.S. Relies on Sudan Despite Condemning It," Los Angeles Times, June 11, 2007.

lviii Nicholas Kristof, "Day 141 of Bush's Silence," New York Times, May 31, 2005, p. A19.

lix See Ken Silverstein, op. cit.

lx John Burton, "Development and Cultural Genocide in the Sudan," Journal of Modern African Studies 29:511-520.

lxi See CRS Issue Brief for Congress, Sudan: Humanitarian Crisis, Peace Talks, Terroris, and U.S. Policy, Congressional Research Service, Library of Congress, April 12, 2006, p. 11.

lxii Peter Beaumont, "Darfur Terror Chief Slips into Britain," The Observer, March 12, 2006.

lxiii Warren Hoge, "U.N. Council Imposes Sanctions on 4 Men in Darfur War Crimes," New York Times, April 26, 2006, p. A10.

lxiv Katz, op. Cit., p. 25.

lxv Debarati Guha-Sapir and Olivier Degomme with Mark Phelan (U.S. Department of State), Darfur: Counting the Deaths: Mortality Estimates from Multiple Survey Data, Centre for Research on the Epidemiology of Disasters, University of Louvain, School of Public Health, Brussels. Http://www.cred@esp.uci.ac.be.

lxvi Washington Post. "Darfur's Real Death Toll." Editorial Page. April 24, 2005. Http://www.washingtonpost.com/ac2/wp-dyn/admin (Accessed April 24, 2005).

lxvii Zoellick, R. "On Darfur, A Call for the Wrong Action." Washington Post. Letter to Editor. April 27, 2005.

lxviii U.S. Department of State. Sudan: Death Toll in Darfur. Fact Sheet. Bureau of Intelligence and Research. March 25, 2005. Http://www.state.gov/s/inr/rls/fs/2005/45105.htm (accessed April 26, 2005).

lxix Kessler, Glenn, "State Department Defends Estimate of Deaths in Darfur Conflict." Washington Post April 27, 2005 , p. A17.

lxx Debarati Guha-Sapir et al., op. cit., p. 7.

lxxi Department of State Publication 11182, op. cit., pp. 5-7.

lxxii See, for example, World Health Organization, Darfur: One Year On, WHO's Work to Save Lives and Reduce Suffering. Geneva.

lxxiii John Hagan and Scott Greer. "Making War Criminal." Criminology. 2002. Vol. 40, pp. 231-264.

lxxiv John Hagan, Heather Schoenfeld, and Alberto Palloni. "The Science of Human Rights, War Crimes, and Humanitarian Emergencies." Annual Review of Sociology. 2006. Vol. 32. In Press.

lxxv The Associated Press, "Survey: Many Thousands Killed in Darfur Attacks," January 20, 2005.

lxxvi On this point, see especially the testimony of Mukkesh Kapila, the former United Nations Resident and Humanitarian Coordinator for Sudan, to the House of Commons International Development Committee. Darfur, Sudan: The Responsibility to Protect. Fifth Report of Session 2004-05. Vol. II: Oral and Written Evidence. London: Station. Off.Ltd.http://www.publications.parliament.uk/pa/cm200405/cmselect/cmintdev/67/6711.pdf.

lxxvii W.C. Robinson, M. Lee, K. Hill, G. Burnham. "Mortality in North Korean Migrant Households." Lancet. 1999. Vol. 354, pp. 291-295.

lxxviii David Nabarro. Op. cit.

lxxix CNN. Report: Up to 70,000 Sudanese Dead. Oct. 17.

Http://www.cnn.com/2004/WORLD/Africa/10/17/un.sudan/
lxxx House of Commons International Development Committee, op. cit., p. Ev 65.
lxxxi Ibid., p. Ev 70.
lxxxii Official correspondence from Hilary Benn, Secretary of State, to Tony Baldry MP, Chairman, International Development Committee, 14 March 2005. Provided to the author by the secretary to the Committee and on file with author.
lxxxiii Op. cit., Vol. I, p. 11.
lxxxiv Debarati Guha-Sapir et al., op. cit., p. 9.
lxxxv U.S. Government Accountability Office, Report to Congressional Requesters, Darfur Crisis: Death Estimates Demonstrate Severity of Crisis, but Their Accuracy Could be Enhanced, Novermber, 2006, GAO-07-24, p. 2.
lxxxvi Op. cit., p. 3.
lxxxvii Op. cit., p. 21.
lxxxviii Op. cit., p. 27.
lxxxix Op. cit., p. 3.
xc
Op. cit, pp. 21-22.
xci Op. cit., p. 23.
xcii Op. cit., p. 24.
xciii Op. cit., p. 25.
xciv Op. cit., p. 25.
xcv U.S. Centers for Disease Control and Prevention (CDC) and United Nations World Food Programme (WFP). Emergency Nutrition Assessment of Crisis Affected Populations: Darfur Region, Sudan. August-September 2004. The alphabetized contributors to this study are: Rita Bhatia, Curtis Blanton, Muireann Brennan, Cecelia Garzon, Mark Phelan, Leisel Talley, David Sussman, Andrew Thornel Lyman, Tami Zalewski.
xcvi U.S. Government Accountability Office, op. cit, p. 34.
xcvii For a fascinating account of MSF and other Frennch NGOs, see Johanna Simeant, "What is Going Global? The Internationalization of French NGOs 'Without Borders.'" Review of International Political Economy. Deceber 2005. Vol. 12, pp. 851-883.
xcviii E. Depoortere, F. Broillet, S. Gerstl, A. Minetti, O. Gayraud, et al. "Violence and Mortality in West Darfur, Sudan (2003-04): Epidemiological Evidence from Four Surveys. Lancet. 2004. Vol. 364, pp. 1315-1320.
xcix U.S. Government Accountability Office, op. cit., p. 41.