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DARFUR: AFTER THE GENOCIDE COMES TO AN END, THEN WHAT?

Samuel TOTTEN

Abstract: Eventually, killing, fighting and rape between the various actors will come to a halt. Black Africans, the Government of Sudan and the international community will still be confronted to 7 main challenges: Arabs are now beginning to settle on land that the black Africans were forced off of by the GOS and Janjaweed; the inexorable desertification of more and more land in Darfur; the ever-increasing lack of adequate water sources in Darfur; the issue of reparations; the plight of females raped during the genocidal period, the status of the original complaints by the black Africans and the issue of bringing the perpetrators to justice.

Sommaire : Eventuellement, les tueries, les combats et viols entre divers acteurs dans la crise soudanaise vont prendre fin. Les Afro Soudanais, le gouvernement en place et la communauté internationale seront toujours confrontés à 7 défis majeurs: les Arabes sans terres se sont installés dans les terres des Noirs internés dans des camps de fortunes par les soldats gouvernementaux et les miliciens Janjaweed, l'incessante et inévitable sécheresse des terres dans la Province du Darfur, les réparations des dommages subis, la précarité des conditions de vie des femmes victimes des viols et violences sexuelles durant la période de génocide, l'issue aux revendications des Afro Soudanais à l'encontre des troupes gouvernementales et la comparution des responsables des divers crimes.

Introduction

By December 2003 of that year, the United Nation's Under Secretary for Humanitarian Affairs declared that the conflict in Darfur constituted the direst humanitarian emergency on the planet. Over the course of 2004, ever-increasing attention was focused on Darfur by UN Secretary General Kofi Annan, the UN Security Council, individual nations, nongovernmental organizations (NGOs), and scholars. While a massive amount of humanitarian aid was flown and trucked into Darfur and hundreds of thousands of words were spoken and written about the situation, little to nothing was done to protect the black Africans from additional attacks in their villages or in internally displaced persons (IDP) camps where hundreds of thousands had fled seeking sanctuary.

In July and August 2004, the U.S. Department of State sent a team of investigators into the refugee camps in Chad, along the Chad/Sudan border, to interview refugees from Darfur for the express purpose of collecting data in order to ascertain whether genocide had been committed (or not) by the GOS and Janjaweed. Upon analysis of the data collected by the Atrocities Documentation Team, U.S. Secretary of State Colin Powell

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declared, on September 9, 2004, that the GOS had committed genocide and was possibly still doing so.

Instead of organizing an intervention to halt the mass killing, the United States referred the matter to the United Nations. Subsequently, the UN decided to conduct its own investigation, the UN Commission of Inquiry into Darfur. Following the UN investigation in which investigators interviewed survivors, alleged perpetrators, various GOS government officials and others during December 2004 and January 2005, the UN, upon analysis of the data, declared that while it did not find that genocide had been committed in Darfur, it did find that crimes against humanity had been perpetrated. Instead of organizing an intervention to halt the mass killing, the UN referred the Darfur matter to the International Criminal Court (ICC). The ICC then decided to conduct its own investigation in Darfur in order to ascertain whether it should bring charges against any GOS government and military officials, the *Janjaweed*, or any other actors.

Over the next four years (2004-2008), various entities (including the UN Security Council, the United States government, the European Union, the African Union, NATO, among others) issued scores of warnings to Sudan to cease and desist from its attacks on the black Africans of Darfur and its support of the *Janjaweed*, sought and brought one UN resolution after another against Sudan, and threatened a host of sanctions against Sudan (only following through on a few) should it not reign in its troops and the *Janjaweed*. Time and again, Sudan made and broke promises and did little to nothing to halt the ongoing mayhem.

In a way that typifies the UN, the UN Security Council got bogged down in *realpolitik* and did virtually nothing to halt the ongoing crimes committed against the black African population. In actuality, it was the *realpolitik* of three of the Security Council's Permanent Five (P5) members -- China, Russia and the United States -- that stalled, if not outright prevented, any real action. Every time a potential resolution or sanction against Sudan was brought before the Security Council, China either threatened to veto it or actually did so. That was not surprising in light of the fact that China has huge petroleum interests in Sudan and a huge weapons deal with the GOS.

Russia also has a large weapons deal with Sudan, and not wishing to risk and forfeit the money it earned from such, it too threatened to veto any resolutions or sanctions against Sudan. As for the United States, it wavered between strongly condemning Sudan for its actions in Darfur and accepting Sudan as a partner in the so-called "war against terror." On May 2005, for example, the United States Central Intelligence Agency (CIA) sent a private plane to Sudan to pick up the Sudanese Chief of National

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Security and Intelligence Service, Major Salah Abdallah, in order to fly him to the United States to meet with the Director of the CIA.

The African Union (AU) began deploying troops in Darfur in spring 2004, initially sending in 150 Rwandan troops and 150 Nigerian troops. Over the next four years, the number gradually increased to 7,000 troops, where it remained for several years. Initially, the AU insisted that it and it alone be allowed to handle the situation in Darfur. In so many words, it meant that it did not want to involve any troops from outside Africa in the deployment. Over time, however, the AU found that it was both sorely out-manned and outgunned by the GOS troops and the *Janjaweed*. Over and above that, it became increasingly obvious that 7,000 troops could not possibly cover the territory of Darfur, whose three states are roughly the size of France. The *coup de grace*, as it were, was the fact that the AU was limited to a Chapter VI (or a peace keeping) mandate which meant that it did not have the right to confront GOS troops or the *Janjaweed* even when the AU troops saw the latter attacking and killing innocent civilians. The mandate allowed for the AU troops to defend themselves if attacked, but little more than that. They were, in effect, little more than monitors of what was taking place on the ground versus protectors of those being attacked and killed.

As earlier as spring 2004, estimates as to the number of black Africans killed in Darfur ranged from a low of 180,000 to a high of 400,000. Since researchers were not allowed into Darfur by the Sudanese government, the exact number of deaths was impossible to state. That is still true today, with the range of those killed generally purported to be between 250,000 to over 400,000. As for the number of people dispossessed from their homes, land and villages, it is estimated to be about 2.3 to 2.7 million. The vast majority are in IDP camps in Darfur, with some 275,000 plus housed in refugee camps in Chad.

It is important to note that not all of the deaths in Darfur were a result of bombings by aircraft or the atrocities committed by the GOS troops and *Janjaweed* on the ground. Also at work is what some genocide scholars call "genocide by attrition." That is, when the black African civilians were forced from their villages, they headed out into the vast stretches of the torrid deserts and mountains. Along the way, many who had been injured died of their injuries due to a lack of medical attention. Others died of malnutrition and/or dehydration. Those who were already infirm or sickly, especially the elderly and infants, died along the way. Some of those who managed to return to their villages in search of loved ones or to see if it was safe to return home frequently drank from wells in which the GOS troops and *Janjaweed* had dumped the carcasses of dead animals they had killed and/or dead bodies of human beings they had slain. As a result of drinking such poisoned water, they (the returnees) often perished.

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The international community has attempted to bring the black African rebels and the Government of Sudan together for peace talks, but little to no progress has come of such efforts. Almost as soon as an agreement is signed, one or the other parties breaks it. Beginning in 2003, the rebel groups began to split into factions. Today, various scholars estimate that the rebel factions now number between thirteen and 28. Most, if not all, factions greatly desire to be involved in the peace talks, not only to push its own agenda but to obtain its share of the spoils once a solid peace agreement is finalized. Thus far, numerous rebel factions have not been invited to the peace talks, and this has resulted in acrimony among the groups, not to mention internecine violence.

Thus, over time, as the fighting between the rebel groups and the GOS and the *Janjaweed* has continued unabated and fighting among the rebels has increased inexorably, the situation on the ground in Darfur has grown even more tenuous. Exacerbating the matter is the fact that bandits have also fanned out across Darfur creating their own form of mayhem, which creates just that much more chaos. Caught in the middle of all the fighters and fighting have been the innocent -- the women, children and the elderly.

In late 2007, the GOS finally agreed, after much haggling, to allow an AU/UN Hybrid Force to replace the AU force. The international community hoped that with the assistance of UN forces, the troops could gain a modicum of control and bring the violence, mass rape, and ongoing attacks on villages to a halt. Only time will tell whether the hybrid force will be successful.

In light of the fact that sooner or later the fighting, killing, and rape between the various actors will come to a halt, it is important to begin to look ahead at the challenges that will likely confront the black Africans if and when they return to their land. Such challenges, of course, are not solely those of the black Africans, but also Sudan's and the international community's. Thus, what is examined in the rest of this article are seven major issues that are bound to be of major concern to all of those who harbor an interest in Darfur: the fact that landless Arabs are now beginning to settle on land that the black Africans were forced off of by the GOS and *Janjaweed*; the inexorable desertification of more and more land in Darfur; the ever-increasing lack of adequate water sources in Darfur; the issue of reparations; the plight and fate of females raped during the genocidal period (and the babies conceived as a result of such rapes); the status of the original complaints by the black Africans against the GOS; and the issue of bringing the perpetrators to justice.

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1. Landless Arabs settling on forcibly vacated land

Of most immediate concern are the rumors that began circulating in 2007 that Sudanese President Omar al Bashir had invited and encouraged landless Arabs from Sudan, as well as other nations (e.g., Chad, Libya), to settle on the land that the black Africans had been forced off of by GOS troops and the *Janjaweed*. Reports by the AU, among others, have established that such rumors are factual, *and* that an ever-increasing number of landless Arabs have begun to establish settlements on the land once farmed by black Africans. This is of most immense concern for as soon as peace is established in the area, black Africans are bound to wish to return immediately to their land. They have, in fact, stated as much to various researchers.

Encouraging and allowing landless Arabs to take over the forcibly vacated land situation does not bode well for the future. Indeed, it is an issue that must be addressed *prior* to the black Africans actually begin returning to their land. If the situation is not addressed in a satisfactory matter *for one and all*, then there is little doubt that it will result in new clashes between the black Africans and the Arabs. When considering this issue it is important to realize how the ongoing conflict over land in Darfur has served as a major catalyst for the conflict between the black Africans and Arabs. As one major drought followed another in the 1970s, 1980s and 1990s, nomadic peoples (also referred to as herders or landless Arabs) began, out of the need locate to food for their herds, to move south towards richer grazing land (which was also adjacent to land being farmed by sedentary peoples). Extreme and recurring droughts simply made it impossible for them to continue to use their traditional grazing areas. Bleak evidence of this was that many had lost large numbers of their livestock due to starvation and dehydration.

Over time, as the landless Arabs became more brazen about using the land of the sedentary farmers (often refusing to request permission), conflicts began to arise and increase in number. As Tubiana (2007) notes "These clashes did not necessarily pit Arab versus non-Arab but they did lead, in 1987-1989, to a wide-ranging conflict between the sedentary Fur and a broad coalition of both cattle-and camel-herding Arab tribes. For the first time, nearly all the Arabs of Darfur came together, united by a new pro-Arab ideology, which was backed by Libya and by successive governments in Khartoum from 1986" onward (p. 70). Seemingly, it was the pro-Arab ideology that planted the seed in the minds of the landless Arabs that they had a right to the land, whether it was deeded to them or not, and that they did not need to request the right to use it. Not seeking such permission went entirely against tradition.

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When confronted over the matter, the landless Arabs reacted with hostility, belligerence and violence. Initially, the attacks were directed at individuals or groups of black African farmers and villages; but in the early 1990s, the attacks slowly but surely morphed into wholesale attacks on entire villages. In fact, it was not rare for black African villagers to be attacked by Arab nomads three, four, five and six times during the 1990s (Totten, in press). During the attacks, the Arabs would threaten, bully, beat and sometimes shoot and kill black African farmers, frequently chasing entire villages from their homes and land, and robbing and/or partially destroying a village. The attacks were not as systematic as they became in the early 2000s -- neither were the efforts aimed at utterly destroying the villages by burning them completely to the ground as became common practice in the early 2000s.

Exacerbating this matter, the landless Arab herders of Northern Darfur (who were never granted traditional rights to specific pieces of land) were, in the early 2000s, increasingly recruited by the *Janjaweed* who were engaged in attacking black African villages. Many of the landless herders who joined the *Janjaweed* were intent on gaining ready and regular access to grazing land they desperately needed as a result of the droughts, the desertification of the land, and "the encroachment of farms on dry season pastures" (Tubiana, 2007, p. 75).

Due to the ongoing hardships of nomadic life, including the great difficulty of locating enough food and water for their herds, many nomads began to desire a piece of land on which to settle. Ultimately, two particular types of land became increasingly desired by the landless (or darless) Arabs: "First are the water holes and pasturelands on the migratory routes of Darfur's northern belt. Second, to the south and southwest are the richer, well-watered lands where a number of Arab groups would like to settle....Arab groups wish to establish sedentary camps in these areas, allowing them to access water, education, and health services" (Tubiana, 2007, p. 75). What is bound to exacerbate the land matter today -- and this is over and above the fact that large numbers of landless Arabs have moved on to the land left behind by the black Africans -- is that the landless Arabs and the black Africans perceive the land issue (that is, the ownership of the land) from two totally opposite perspectives. Before describing each group's position, a short discussion of the history of land tenure in Darfur is called for. In this regard, Tubiana (2007) reports that

Darfur's traditional land tenure system was developed under the Fur sultanate, a centralized state with an effective bureaucratic and military system that lasted from the seventeenth century until its destruction by the British in 1916. Masters of the land, the sultans distributed *hawakir* (territories with clear boundaries; singular, *hakura*) to Fur

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leaders and dignitaries, to leaders from other groups who were their vassals, and to *faqis* (Muslim scholars). Often, the subjects and "guest-subjects" from other ethnic groups who also lived on the land in fact collectively assumed territories given through *hakura* to an individual. Thus the *hawakir* of a given chief would make up his people's *dar* (house, country, land)....The sultanate was known as Dar Fur -- land of the Fur -- but it was in fact a multi-ethnic patchwork of Fur territories and no-Fur dars.¹

...Not everyone, however, [had, nor] has equal access to land. In southern Darfur, the main Arab and non-Arab groups -- the Rizeigat, Habbaniya, Beni Halba, and Ta'aisha -- have all had dars since the days of the sultanate, and as early as the eighteenth century for the Rizeigat. In the north and west, on the other hand, practically all of the non-Arab groups have land while most of the Arab groups do not. Most farming communities have traditional tenure rights, while nomadic communities do not -- the herders' highly mobile nature is part of the reason why they do not have, or did not need, *dars* or *hawakir*. The dar-less Arabs include the northern Rizeigat, or Rizeigat *shimaliya*, who are known otherwise as Rizeigat Abbala or Jammala (camel herders), and are distinct from the Rizeigat Baggara (cattle herders) of southern Darfur.

The northern Rizeigat and other groups only have *damrat* (singular: *damra*) inside non-Arab dars. In both Darfur and Chad, the word *damra* traditionally refers to "the habitual settlement place of [Arab] tribes, and often the location of dry-season farms" or "a small, temporary village that hosts those who cannot accompany the herds to their grazing grounds." In Darfur today, a *damra* describes semi-permanent and even permanent encampments where some services may be available, such as a school or a primary center. These *damrat* groups are, in theory, under the authority of the non-Arab chiefs whose land they live on, at least for part of the year. Beginning before the war, however, support from the Khartoum government had enabled these groups to establish a measure of independence from the non-Arabs (Tubiana, 2007, pp. 73, 74, 81).

To attempt to fully appreciate the land-less Arabs' perspective (and thus, at least in part, their position), it is important to be cognizant of a key change made by the British in 1925 that has had a lingering and dramatic effect on land issues facing Darfur today.

¹ Significantly, "the British endorsed these written claims and produced documents and maps of their own. Over the years, post-independence governments have referred to both sultanic and colonial documents to resolve local disputes over land" (Tubiana, 2007, p. 83). A major problem, however, is that many of these documents may have been destroyed during the recent (2003-2008) attacks carried out by the GOS and the *Janjaweed*. Some have asserted that the destruction of such documents was purposely carried out so that they would not be available in the future as proof of land ownership. There is, however, no definitive proof that this is the case.

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More specifically, “[a]s the British confirmed existing tenure rights [under the Land Settlement and Registration Act of 1925], they made changes in the so-called native administration....They anointed the paramount chiefs of the leading Arab groups with titles that put them on a par with the sultans, *maliks*, and *shartais* of the non-Arabs. That is how the four large Baggara groups of southern Darfur, as well as the Zayadiya and Bani Hussein of northern Darfur, acquired *nazirs*” (Tubiana, 2007, p. 81).

The significance of the latter is that while the black Africans assert, correctly, that the land they lived on in Darfur was deeded to them as far back as the sultanate, the landless Arabs assert that *nazirs* hold the rights to a dar and since that it is the case they, the landless Arabs, have a right to use the land whenever and however they wish. Complicating matters is the fact that over “the past [thirteen] years [1995-2008], the government [of Sudan] has fueled and manipulated this notion, awarding numerous *nazirates* to small branches of the northern Rizeigat, as well as to the Ma’ailya, whose *nazirate* ambitions placed them on a collision course with the Rizeigat Baggara” (Tubiana, 2007, p. 81). It also, of course, put them on a collision course with the sedentary non-Arabs.

When all is said and done, all groups and people living in Darfur need to be able to use land in a way that meets their needs. When one group’s very livelihood is endangered due to a lack of land and water, conflict will inevitably follow. With the ever-increasing desertification of the region, along with what will likely be future droughts, a practical and fair solution for all actors must be found – and soon. Seemingly, the GOS is neither interested in nor willing to help in developing and implementing such a solution, thus it seems as if the international community must take the lead and, at the same time, apply pressure on GOS to follow suit. Basically, what is needed is a new land tenure system/act that is inclusive, not exclusive, and one that takes into consideration the various actors’ real needs. Concomitantly, solutions need to be found that offset, if not prevent, the desertification and droughts that ravage the area. There is also a critical need for locating/creating ample water sources for everyone. If such actions are not taken, then violence is likely to become a way of life in Darfur.

2. Ever-increasing Desertification of Darfur

For many years, Darfur, as well as other regions in Africa, has seen the sands of the Sahara Desert grow in magnitude, gobbling up precious and desperately needed grazing and farming land. In “Desertification: The Scourge of Africa,” Michael Bernard Kwesi Darkoh (2007), Professor of Geography at Kenyatta University and an expert on desertification, provides a short explanation as to the cause of desertification:

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Its main causes are *drought, desiccation* and *human activities*. *Drought* is protracted rainfall failure. Its duration is usually short-term, one to two years. In ecological terms, it is a dry period from which an ecosystem often recovers rapidly after the rains return. *Desiccation* is a process of aridification resulting from a dry period lasting in the order of decades. *Human activities* include over cultivation, overgrazing, deforestation, poor irrigation practices and any other inappropriate land use and human management of ecosystems (emphasis added) (p. 1).

Desertification has created hardships for both landless Arabs who are in need of wide swaths of fairly fertile land on which to graze their herds, and farmers. Bereft of ample grazing land, which results in a lack of adequate amounts or types of food for the herds, means that the herders either must seek out new land on which to graze their herds or watch passively as their herds perish. As early as the 1970s, landless Arabs began moving south in search of land on which to graze their herds. Many had lost large numbers of their livestock due to starvation and dehydration. Not only did Arabs wish to locate more fertile lands but felt compelled to "gain control of land in the less arid areas" (Tubiana, 2007, p. 77). Slowly but surely, the pastoralists began to encroach upon the farmland of sedentary people. At one and the same time, as farmland became less productive farmers began to farm what once was pastureland, thus settling on land traditionally used by the pastoralists. The desertification of large swaths of Darfur continues unabated to this day as the Sahara Desert moves inexorably southward.²

Traditionally, the black Africans and the landless Arabs had enjoyed a symbiotic relationship of sorts in which the Arab herders sought permission to graze their herds for a reasonable period of time on the land of the black Africans. Such permission was nearly always granted. In turn, the animals fertilized the land of the black Africans. However, around 1987, with the introduction of a new pro-Arab ideology, "which was backed by Libya and by successive governments in Khartoum from 1986 onward" (Tabiana, 2007, p. 70), the herders began to use the land without seeking permission and this resulted in conflict that often degenerated into violence -- violence that was most frequently aimed at the black Africans.

A key question/problem is: How can the Sudanese government and/or the international community begin to address the critical issue of land in an efficacious manner (that is, in a way that is peaceful and equitable for landless Arabs and the sedentary farmers, alike)? Fortunately, there is no need to begin such efforts from scratch. Numerous

² Global warming, of course, only exacerbates the situation.

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researchers, environmental organizations, and nations have invested enormous amounts of thought, effort, money and time into developing and testing new ideas, approaches and technologies in an attempt to halt desertification. Once the ongoing attacks by the GOS and Janjaweed are stanchd once and for all, and once the international community (with or without the GOS) begins to plan how the landless Arabs and black Africans can live together in peace and in a way that is equitable to both, this is where experts in desertification, hydrology, ecology, and agriculture from around the world could bring to bear their expertise.

Halting desertification, implementing alternative ways of grazing and farming that are less harmful to the land, "greening the land," and growing more on less land could, with adequate planning and financial assistance from the international community (and ideally the GOS), help to meet the needs of all actors in Darfur. Specifics along these lines will be discussed later in this article

3. Combating desertification: a value to all

Addressing desertification with the hope of slowing it, if not halting it, is, of course, an extremely complex problem. Indeed, it is one that is not likely to be solved quickly or easily. But, according to many researchers, it can be done, *if* there is the will, the effort, the support and funding needed to accomplish it. Granted, that is *a lot of "ifs."* It is important to reiterate the point that solving the problem of desertification is not solely a technical problem. Indeed, to attack desertification as if it were solely a technical problem would be a grave error. As Edmund Barrow, the World Conservation Union's technical coordinator for forest and dryland conservation in Eastern African, has stated, "what's needed is more recognition from governments and donors about the importance of building on the wealth of customary knowledge" (quoted in Klaushofer, 2007, p. 2).

Furthermore, it is critical to appreciate the fact that simply placing herders on farms that have adjacent grazing land will not solve the problem either; in fact, without careful planning and attention paid to the critical need for an ecological balance vis-à-vis the use of the land, equally severe problems are bound to ensue. Significantly, "overgrazing is not so much a function of animal numbers but of time the pasture is exposed to grazing. Where wildlife could migrate freely and in traditional herding systems a pasture was intensively used for a short period and then left to stand, increased sedentarization of herders has led to more permanent grazing in one location, with little or no time for the plants to rest, resulting in localized desertification" (Lühl, Hans-Peter, 1992, n.p.).

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For over 30 years, the international community has, in various ways and to various extents, addressed the issue of desertification, and yet the problem has just intensified. As far back as 1977, the United Nations Conference on Desertification adopted a Plan of Action to Combat Desertification, but in 1991, the United Nations Environment Programme concluded that "the problem of land degradation in arid, semi-arid and dry sub-humid areas had intensified, although there were 'local examples of success'." In 1992, conferees at the United Nations Conference on Environment and Development (UNCED) concluded that what was needed to combat desertification was an integrated (versus a single or dual) approach. At one and the same time, those at the conference agreed to emphasize programs that promote sustainable development at the local level. Concomitantly, the Conference called on the UN General Assembly to form an Intergovernmental Negotiating Committee to develop a Convention to Combat Desertification. Ultimately, the Convention was adopted on June 17, 1994 and entered into force on December 26, 1996. A decade later, the United Nations declared 2006 as the International Year of Deserts and Desertification. To this day, biannual meetings continue to be held around the Convention.

Unfortunately, up to this point in time various problems have plagued the effort to combat desertification, and among the most pressing are as follows: (1) far too many of the efforts have been piecemeal versus holistic or integrated. To believe that a single approach or two is going to successfully combat such a complex problem is folly at best; (2) many efforts to combat desertification have been approached solely as a technological problem, and technology alone is not going to solve the problem; (3) many countries have not been proactive in combating desertification. That is due to a number of probable reasons: a lack of appreciation of the seriousness of the issue; having other, ostensibly more pressing priorities; a lack of knowledge; and/or a lack of funding; (4) there is a lack of national *and* local commitment to change traditional practices that have had (and continue to have) an adverse impact on the ecological landscape (Darkoh, 2007,n.p.); (5) the local people are not provided with the tools/education they need to become an integral part of the solution; (6) the international community has promised to help countries and regions suffering from desertification, but has not backed up its promise with adequate funding, the requisite expertise, or the training of locals to take on the task; (7) there has been a lack of political will by both individual countries and the international community to attempt to implement a truly effective solution to desertification (such an effort would need to deal with the problem as a social/human issue (taking into consideration the needs, knowledge and expertise of the people in the area) as well as a technological issue; be well-funded; and sustained over the long-haul with ongoing evaluations vis-à-vis its effectiveness or lack thereof; and (8) solutions are not well thought out, and often result in counterproductive measures.

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That said, researchers are intent on developing efficacious methods for slowing, if not halting, the ever expanding deserts. For example, at the latest series of meetings, in 2006, of the Intergovernmental Negotiating Committee, researchers and representatives of various governments discussed the following ideas and issues: the promotion of agroforestry and conservation; the rational use of rangelands and the promotion of fodder crops development; the development and implementation of ecological monitoring, natural resources mapping, remote sensing and early warning systems; the promotion of new renewable resources and technologies germane to the issue of desertification; and the promotion of sustainable agricultural farming systems.

Some nations have gone beyond studying the issue and have actually begun experimenting with various innovations to combat desertification. Some of the approaches have worked remarkably well, others have not. In some cases, land once considered wasteland or moribund has become "green" again. China, one of the leaders in fighting desertification, has had remarkable success. Certain nations in Africa have as well. For example, the Institute of Science in Society (2008) reports that

In [the] Maradi district of southern Niger, where repeated droughts have wrought environmental damage, farmers have reversed the damages and reclaimed the desert. This was also true of [the] Machakos (renamed Makueni) district of Kenya. In the 1930s, British colonial scientists had condemned the bare eroding hills of the drought-prone area to environmental oblivion; likewise, the local Akamba people were seen as doomed to a miserable poverty-rife existence. The same narrative was consistently reproduced in the 1950s and 1970s. Yet researchers found the hills greener, less eroded and more productive than before, despite a fivefold population increase. The Akamba had responded to the droughts by switching from herding cattle to settled farming, giving them incentive to work the land effectively (n.p.)

Granted, the nomads of Darfur may have no desire to radically alter, let alone completely change, their lifestyle; indeed, some may simply refuse to do so.³ Then

³ There is ample evidence, though, that at least some people in the region are amenable to altering their way of life when dire circumstances, such as extreme drought or recurring drought and famine, dictate such a change. For example, in his landmark book *Famine That Kills: Darfur, Sudan*, De Waal (1989, 2005) reports the following: "Since 1969 a combination of drought, desertification, and economic changes have transformed Zaghawa society.... [D]uring the fifteen years to 1984, the Zaghawa effectively adapted to a changing environment.... One important change has been a shift from herding cattle to herding camels and goats" (pp. 93, 94).

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again, it is a fact that the killing that has taken place in Darfur has been, at least in part, a result of the coveting of land by those nomads who desire more space to graze their herds, if not to settle down on now and again. Thus, it might be possible, with enough encouragement and support, to convince some to take up farming, at least part time. If not, then there are certainly numerous other ways to accomplish the goal of regenerating large swaths of land in Darfur. Some of the many ideas that have been developed and tested in other parts of the world are briefly described below.⁴

As for those ideas and techniques that have met with the most success thus far, a particularly promising method that has worked in regions suffering drought and desertification is that of planting so-called bio-crops. Such an approach has met with great success, for example, in China. More specifically, in China's Inner Mongolia autonomous region, "poor peasants are pushing back desertification by planting a drought-resistant tolerant shrub [sand willows] that is [also] being used for the production of timber and bioenergy. [Strikingly,] the desert greened for the first time. The effort [also] provides livelihoods, brings wealth to the poor, and ensures local access to energy" (Google Alert for Desertification, 2007, n.p.). Such an approach is commonly referred to in China as the "integrated sand-fixation technology" (Google Alert for Desertification, 2007, n.p.). A key question that remains is whether the sandwillows are sustainable over time; that is, whether once they are harvested numerous times, they have the ability to continue to tap into water sources which, in turn, will enable them to continue to flourish through numerous cycles of growth.

One group of scientists, The Consultative Group on International Agricultural Research (CGIAR), have worked for over 35 years to develop both the knowledge and means to combat desertification and its adverse impact on people. An integral element of their work involves the promotion of the sustainable management of natural resources such as biodiversity, forests, soils, and water. Their work, in part, has involved the development of new "hardy crops," such as new, high-yielding, stress- and disease-resistant crop varieties of beans, cassava, corn, grass pea, orange-fleshed sweet potato, pearl millet, rice, sorghum and wheat. Such efforts, they claim, "are increasing food availability in some of the poorest, desertification-prone parts of the world" (from the CGIAR website, www.cgiar.org/impact/global/desertification.html).

⁴ In light of the tremendous amount of land being gobbled up in the region by desertification, it might be more beneficial to attempt to protect the land that is still in use but in imminent danger of being overtaken by the desert. Indeed, that may be the wisest decision for, at this point in time, it appears that there is neither the knowledge, expertise, funds nor the will to even begin to attempt to recover the thousands of square acres that have already turned to desert.

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The same group of scientists are also working on the "improved mangagement of resources." On their website, they assert that ...protecting the biophysical foundations of agriculture - biodiversity, forests, livestock, soils, and water -- is critical to meeting the threats posed by desertification. New techniques such as applying small amounts of fertilizer, or micro-dosing, are increasing grain yields by 30 to 50 percent in west Africa. By expanding cactus cultivation in the Maghreb region, poor farmers are increasing their incomes while generating additional sources of feed for animals, preventing wind erosion and stabilizing sand dunes. Improved agroforestry practices are helping regenerate nutrient-depleted soils in east Africa, while watershed programs are reducing soil loss and increasing cropping intensity (from the CGIAR website, www.cgiar.org/impact/global/desertification).

Corroborating the impact of micro-dosing, Mark Winslow, who is with the International Crops Research Institute for the Semi-Arid Tropics, states that "If you buy about \$10 worth of fertilizer, you get about \$50 worth of extra millet, cereal crop in the dry area of the Sahel. A lot of potential solutions that have been developed by research, or are being developed, have not been implemented, because we do not have the world commitment that the problem needs. So, we are trying to highlight some of the solutions. One example is micro-dosing and that is to overcome the belief that fertilizer is a bad thing for dry places, because we have research that shows that, if you use the right type of fertilizer, it can actually be a good thing (quoted in da Costa, 2006, n.p.)

A strange sounding but intriguing idea is that of establishing "camel farms." Instead of camels (and other animals) roaming across vast areas and overgrazing, which contributes to desertification, farms (ranches, really) are erected where camels are fed and watered. By containing camels in specialized areas, it allows for the "recovery of desert ecosystems" (Nair, 2007, p. 1). The United Nations Educational, Scientific and Cultural Organization (UNESCO), in fact, supports the need to develop camel farms for the express purpose of combating desertification in the Gulf countries. A camel farm already exists in Dubai, and UNESCO is now conducting research into the efficacy of camel farms as a way of combating desertification. Should camel farms prove to be effective, then they could possibly be implemented in the Sahel. Be that as it may, Nair (2007) adds a cautionary note about such farms cum ranches:

...the feasibility and success of this new sustainable livestock industry will require strict grazing laws as well as a sustainable system for fodder production....However, the ability to recover for certain areas always depends on the soil and the degree of degradation that has taken place. The recovery is minimal if the degradation has been high. Areas might not recover where the top soil has blown away (p. 1).

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Thus, while this method may not be feasible for totally barren stretches of Darfur, it could contribute to helping prevent the degradation of land that is still useable and recoverable. As for providing fodder for the animals, botanists and ecologists argue, reasonably, that "producing indigenous plants is a more sustainable way of fodder production because the amount of freshwater needed for irrigation can be significantly reduced when compared with Rhodes grass and alfalfa" (Nair, 2007, p. 1).

To implement these and other ideas/approaches will, undoubtedly, take a great deal of thought, research, energy, time, money, cooperation and political will, but the result of not doing so could be, in numerous and varied ways, catastrophic. In light of the GOS' negative view of most of the areas outside the riverine region (e.g., a lack of real concern regarding the needs of the people), it is obvious that the international community and nongovernmental organizations are going to have to shoulder the load if they hope to see such an effort come to fruition – and that load will be, in part, convincing the GOS of the sagacity of supporting the effort (or, at the very least, not hindering it). What has been presented here constitutes merely a few of the many possibilities that can be used in the fight against desertification.⁵

None of the aforementioned approaches should be misconstrued as *the* panacea for desertification. Indeed, for any of the approaches to have a chance at success, the local people must be willing to work together, learn new and (what may be) "strange" techniques foreign to their way of life; and commit to change over the long haul. While nothing is impossible, it is unlikely that such approaches will even be attempted in Darfur unless (a) the international community is behind the effort 100%, (b) the Government of Sudan supports the effort, and (c) the people of Darfur do their utmost to live peacefully and cooperatively make a unified effort to not only rebuild their lives, but to share the land as they work to regenerate it for the use by one and all. That, of course, is a tall order. Indeed, what is being suggested (and is certainly needed) is a paradigm shift. So, the question that must be asked is this: Do the people of Darfur, the GOS, and the international community have the foresight and the will to move in this direction? It is dubious; but then again, it is possible. Time will tell.⁶

⁵Due to space constraints, the descriptions of these approaches are extremely brief, and thus do not do justice -- of course -- to either the complexity of the tasks involved or the limitations of each.

⁶Bill Gates and his foundation (The Bill and Melinda Gates Foundation) are certainly doing their part to assist the ongoing effort to overcome the causes and results of drought. On January 25, 2008, at the World Economic Forum in Davos, Switzerland, Bill Gates announced that his foundation was donating 306 million in grants: "The largest part of the grant, \$165 million, is earmarked for the Alliance for a Green Revolution in Africa, whose express purpose is the revitalization of degraded soil that impacts some four million farmers in dozens of African countries" (Dugger, 2008, n.p.). Significantly, "the foundation's approach seeks to avoid problems that have led to

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5. Ongoing lack of adequate water sources

As a result of numerous and serious droughts, as well as the ever-encroaching desert sands, all of the peoples of Darfur -- Arab and black Africans, alike -- have seen precious water sources either recede and/or totally dry up. No one can live without adequate amounts of water in such a torrid area, and both the need for water as well as the protection of water sources for one's own use have often led to bitter, violent and deadly battles. At least up until the recent genocidal activity in Darfur, neither the GOS nor the international community gave any thought, let alone assistance, to helping the people of Darfur find ways of conserving water or locating additional sources of water. If there is to be any hope that the fighting in Darfur is to be stanchd once and for all, then it is absolutely essential that the latter two issues be dealt with in a satisfactory manner.

A highly effective approach to farming in arid areas already exists, and that is the method of drip irrigation, which was developed in Israel over 70 years ago. Drip irrigation, in fact, is currently one of, if not the most, efficient methods of irrigation for the purpose of saving water. This is true ...since the drippers emit the water directly to the soil adjacent to the root system (which absorbs the water immediately), evaporation is minimal. This characteristic is especially important under the conditions prevailing in arid zones....Water use efficiency (WUE) is defined as the ratio between the amount of water taken up by the plant and the total amount of water applied. Studies show that drip irrigation has a WUE of about 95%, versus 45% for surface irrigation and 75% for sprinkler irrigation (Sitton, 2000, p. 2).

Another successful method of water conservation is "contour bunding." A low tech method, contour-bunding involves lining up stones along slopes and contours of land in order to assist and increase rainfall soaking into the ground, while helping to halt topsoil from washing away. Finally, some geologists believe that Darfur might be sitting on ancient aquifers that can be tapped for water. In fact, a search is currently underway to locate such acquifers. While dismissive of the speculation by Boston University

disappointing results for other aid-financed agricultural projects. Instead of relying on professionals from wealthy countries who eventually leave and take their skills with them, it seeks to educate, train and employ people from poor countries to conduct the scientific research and advise farmers about crop techniques and livestock care, among other tasks" (Dugger, 2008, n.p.)

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researchers that there may be a ancient giant underground lake in Darfur the size of Lake Erie, Alain Gachet (2007), a French geologist who is helping a UN-backed project to drill for water. In the rebel-controlled Jebel Mara area of Darfur, has asserted that "There is enough water within [other] aquifers [in the area] to bring peace in Darfur... and even more - enough to reconstruct the economy of Darfur" (n.p.).

To locate and tap such water sources will undoubtedly require, in addition to the requisite expertise, a good amount of time, and money, but it seems as if the international community would be better off contributing to such an effort versus repeatedly attempting to halt conflicts over water and spending tens of millions (if not hundreds of millions or more) in the process.

6. Reparations?

Thousands of black African villages have been utterly destroyed by the GOS troops and *Janjaweed*. Such villages have been bombed by Antonov airplanes, and put to the torch by GOS troops and the *Janjaweed*. All that is left of such villages are large round blackened circles on the ground. In addition to having their homes and villages destroyed, the black Africans saw their crops and, in certain cases, orchards, utterly destroyed. Farmers tell of witnessing the cutting down of tree after tree after tree by the perpetrators, as well as the destruction of their farmland as the hordes rode in on camels and horses and trampled and destroyed their crops. Anything of value -- bags of grain, fruits, vegetables, livestock, camels, horses, farm implements -- were, more often than not, stolen by the marauders. Stories are told of the GOS coming in with tractor trailers and hauling the black Africans' worldly possessions away, either to be stored by the government, shared by the pillagers or sold in *suqs* across the land.

The vast majority of internally displaced persons (IDPs) and refugees only managed to bring a few pots and blankets with them as they fled for their lives. As a result, most are destitute and will be destitute when they return to their villages (and that is assuming that they will even be allowed to return). Both the IDPS and refugees, as well as various members of the international community, are already talking about whether the GOS will be forced to pay the black Africans reparations for what was violently taken from them. If the GOS refuses, then the question is: will the black Africans be so resentful that the fighting may begin anew? Or, if the GOS refuses to do so, will the international community step in and assist the black Africans to regroup, rebuild their homes and villages and *suqs*, dig new wells, replant their farms and/or orchards and restock what they lost?

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7. Plight/fate of raped girls and women and their babies (physical and psychological health)

An untold number of girls (as young as eight years old) and women have been raped over the past four years by Government of Sudan troops and Janjaweed (U.S. State Department, 2004; Totten, in press). Rape seems to have been perpetrated for numerous reasons: the treacherous pleasure of the rapists; purposeful humiliation of the entire black African population; a means to terrorize the black Africans and thus force them out of Darfur; and as a genocidal instrument.

The perpetrators/rapists know full well that if a black African female is raped she will likely be shunned by her immediate family and fellow villagers. Such a female is perceived as "tainted." Those who are young and unmarried are ultimately perceived as not fit for marriage. Many, if not most, females who are raped are forced out of their homes and villages by their fathers, husbands, or brothers. With no one to care for them or to help them in life, the females must live on their own and fend for themselves and/or the babies born as a result of the rape. Some have been known to travel far from their village in order to try to start over where they are not known and thus not perceived as tainted.

Many, if not most, females refuse to tell their loved ones what happened to them at the hands of the rapists out of fear of being shunned and forced to leave their families, homes and villages. Concomitantly, many, if not most, refuse to seek medical treatment for any injuries they have suffered as a result of the rape and/or diseases they have contracted from the rapists. They refuse such help for, again, they want to avoid being singled out as a rapee and the disgrace that has befallen them.

Those females and their children who have been shunned and forced to eke out a meager existence will need assistance from the international community if they are to have any hope for a decent life. Such help will likely include medical assistance, psychological and trauma counseling, and financial assistance. As for those females who continue to reside with their families, the situation is even more complex: how will such females be provided the type of medical and psychological assistance they need to live fruitful and healthy lives if they are not willing to speak about the fact that they've been sexually assaulted? Those who don't speak up may be condemning themselves and their children to lives of tortured psyches and potentially deadly illnesses such as HIV/AIDs.

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8. The original complaints that led, in part, to the rebellion by the Black African rebels

The GOS, the black Africans, and, undoubtedly, the international community, will ultimately need to figure out how to satisfactorily address the original complaints of the black Africans that, in part, served as the catalyst for the rebel attacks against the GOS in 2001. If such complaints *and* the black Africans' sense of disenfranchisement are not addressed then the seeds for future and potential violence are already being sown. Among the major concerns expressed by the black Africans of Darfur in the early 2000s were the following: a lack of participation in local governance; a lack of infrastructure (roads, bridges, clean wells in Darfur); a lack of schools; a lack of adequate medical facilities; a lack an adequate number of nurses and doctors; and unfair treatment at the hands of the local police and the court system. Each and every one of the complaints is doable. While addressing many of the issues/complaints (i.e., an adequate numbers of roads, bridges, clean wells, schools, medical facilities, nurses and doctors) will simply require adequate funding by the GOS (and that should be no problem to oil rich Sudan), they all will require the good will of the GOS.

Unfortunately, the one critical component that is frequently missing from the GOS' dealings with its minority and outlying groups is that of good will. In light of that, it may well take immense pressure and assistance from the international community to see such projects come to fruition. Then again, as the world has seen over the past five years vis-à-vis Darfur (and twenty long years vis-à-vis the crisis in southern Sudan (the mid 1980s to the early 2000s), the one thing that the GOS seems to be an expert at is refusing to budge or being forced into a position that it does not favor. Such concerns, however, are not going to disappear as a result of wishful thinking.

9. Bringing the perpetrators to justice

Those individuals who planned, ordered, led, and and/or oversaw the mass murder, mass rape and wholesale destruction of Darfur must be held accountable. To not hold such individuals accountable will not only send the wrong message to the perpetrators, but be a terrible insult to the victims and survivors. Ultimately, it is up to the courts -- most likely the International Criminal Court (ICC) at the Hague -- to make the final decision in regard to whether various actors should be held accountable for genocide, crimes against humanity, or war crimes. The key, though, is to try the alleged perpetrators in a court of law, allow the victims to have their day in court, and to render a just decision and issue a just punishment for those found guilty. Those mass killers and mass and rapists who are allowed to walk away scot-free are likely to embolden

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perpetrators everywhere. That is plain wrong in that it allows impunity versus the law to become the rule of the day.

Conclusion

The crisis in Darfur is far from over. Attacks continue to be carried out to this day (February 21, 2008) against the black Africans by the GOS and *Janjaweed*. Battles between the GOS/*Janjaweed* and the rebels groups also continue unabated. And now, adding to the chaotic mix, the innocent are caught up in raging battles between and amongst the various rebel groups and even between and amongst groups of *Janjaweed*.

Once the fighting and killing stops, the crisis in Darfur will still be far from over. Indeed, if a host of underlying issues (desertification, recurring droughts, conflict over land, and a general sense of disenfranchisement) are not addressed and addressed in a way that is satisfactory to both black African groups and Arabs (both sedentary and nomadic or landless), then the post-genocide period could prove to be as volatile as the first five years of the genocidal period (2003-2008).

Time is of essence in addressing the aforementioned issues. To put off figuring out how to address such issues in a timely and effective manner is asking for trouble. In light of that, the international community should, at this very moment, be engaged in working with the GOS, black African groups and Arabs in an attempt to make and show solid progress on all these fronts. Of course, that is easier said than done when war continues to rage on in the region. Indeed, some are bound to ask, how can the very actors who are still engaged in violent conflict be expected to address such issues when they cannot even work out a peace among themselves.

It is a fair question, but it is also one that does not face the fact that the issues yet to be solved could serve, in part, as the linchpins for bringing about the peace. That is, if, for example, the black African groups saw that the GOS was truly serious about helping Darfur build a stronger infrastructure (e.g., roads, bridges, wells with water that is not contaminated) and everyone involved saw that the international community was serious about helping to solve the problems that have resulted in the bitter conflict over land, then the various actors might be more inclined to work harder and more assiduously for peace.

But then again, realistically, it must be said that as long as the current government in Sudan remains in power and the riverine elite continues to view all those outside the

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riverine area as lesser beings than themselves, the problems plaguing Darfur are not only likely to persist but to increase in number *and* in deadly violence.

Selected References

1. AMERICAN-ISRAELI COOPERATIVE ENTERPRISE (2001), *Israeli Agro-Technology*, Jewish Virtual Library, accessed at www.jewishvirtuallibrary.org/jsource/Economy/eco3.html
2. BBC NEWS (2007), *Ancient Darfur Lake. Is Dried Up*, July 20, accessed at news.bbc.co.uk/2/hi/africa/6908224.stm
3. CIGAR (2008), *Research and Impact*, accessed at www.cgiaar.org/impact/global/desertification.html
4. COSTA G. (2006), *Groups Seek to Combat Desertification in Sub-Saharan Africa*, News VOA H Com. September 23.
5. DARKOH M., KEWSI B. (2007), *Desertification: the Scourge of Africa*, October 6, *Desertification*.
6. WAAL A. (1989, 2005), *Famine That Kills: Darfur, Sudan*, New York, Oxford University Press.
7. DUGGER, C. (2008), "Gates Foundation to Give \$306 Million to Assist Poor Farmers", *The New York Times*, January 25.
8. HUTCHINSON C., HERMANN S. (2006), "The Future of Drylands Revisited" in *A World of Science: Natural Sciences Quarterly Newsletter*, 4
Accessed at: unesdoc.unesco.org/images/0014
9. INSTITUTE OF SCIENCE IN SOCIETY (2008), "Greening the Desert", ISIS Press Release January 2, Accessed at www.i-sis.org.uk/greeningTheDesert.php
10. LÜHL H. (1992), *Holistic Resource Management: Can It Beat Desertification*,
Accessed at www.metafro.be/leisa/1992/8-3-10.pdf

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11. KLAUSHOFER A. (2007), "*Global Plan Tackles Neglected Issue of Desertification*", September 27.
12. SITTON D. (2000), *Development of Limited Water Sources: Historical and Technological Aspects. Focus on Israel*, October. Accessed at www.mfa.gov.il/.../land/focus%20on%20israel%20development%20of%20limited%20water
13. TOTTEN S., "Genocide in Darfur." In Totten S. and PARSONS W. S. (Eds.), *Century of Genocide: Critical Essays and Eyewitness Accounts*, Third Edition. New York: Routledge.
14. TOTTEN S., *The Mass Rape of Females in Darfur*", In TOTTEN S., (Ed.) *The Plight and Fate of Females During Period of Genocide and in Its Aftermath*, New Brunswick, Transaction Publishers.
15. TUBIANA, J.(2007), "Darfur: A Conflict for Land?" In WAAL A. (Ed.), *War in Darfur and the Search for Peace*, Cambridge, MA: Global Equity Initiative, Harvard University and Justice Africa, pp. 68-91
16. UNITED NATIONS (2008), *United Nations Convention to Combat Desertification*. New York.
17. UNITED STATES, Department of State (2004), *Darfur Atrocities Documentation Report*, Washington, D.C.