



# UNITED TRAUMA RELIEF

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY (MIT)

[ About United Trauma Relief ]

United Trauma Relief (UTR) is a MIT-based non-profit student organization started in December 2000. UTR members aid sufferers of poverty, disease, and war through active “redistribution efforts”—student-led initiatives to redistribute relief supplies from first-world countries to developing nations. In their first semester, student members of UTR participated in programs to bring earthquake relief supplies to victims of quakes in Ecuador and India, foodstuffs to the hungry in Sudan, and AIDS drugs to patients in Haiti. This report will describe each of the organization’s programs in detail and will outline anticipated future projects, both local and international.

## [Disaster relief services]

### EL SALVADOR

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*January 12th, 2001:* An earthquake struck 55kms south of Playa Blanca, 100kms from San Salvador, causing immediate and extensive damage throughout the country.

UTR immediately funded teams already present in the country, focusing on the provision of water and sanitation supplies for the homeless, as well as bringing direct medical relief to affected villages. Aid efforts were focused on the rebuilding of local hospitals and the procurement of mental health services for victims.

La Libertad, San Vicente, and La Paz were the hardest hit areas. Six hospitals had been destroyed near these cities. Our funds helped provide immediate disaster services and medical treatment nearby, along with continuing mental health support in the area, primarily through Medicins san Frontieres ([Doctors Without Borders, http://www.msf.org](http://www.msf.org)) and the International Red Cross Disaster Response Team (<http://www.icrc.org>).

### INDIA

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*January 26th, 2001:* An earthquake measuring 7.9 on the Richter scale struck the state of Gujarat, claiming between 30,000 and 100,000 lives. Its epicenter was located near the town of Bhuj in the Kutch region of Gujarat.

UTR assisted the Agency for India's Development ([AID, http://www.aidindia.org](http://www.aidindia.org)), which combined disaster relief services with long-term rebuilding and grassroots development strategies. Support went chiefly to the Self-Employed Women's Association (SEWA), the Janpath Citizen's Initiative, and other groups that supplied relief material, food, medical supplies, and temporary housing. The post-earthquake operation included at least 64 aid flights within one month, distributing plastic sheeting, blankets and 15,000 family tents through Medicins san Frontieres. Local people were also trained in group psychotherapy practices to assist victims of trauma.

### FUTURE PROSPECTS: SIERRA LEONE

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In Sierra Leone, rebel armies have tortured civilians into submission by cutting off their limbs. UTR is planning a prosthetic limb drive for these amputees. UTR will pay for shipment of spare prosthetics and back braces to be sent from New England medical centers to clinics in Sierra Leone, where they will be fitted to victims of the war.

## [Epidemic Relief Services]

### HAITI

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While the costs to produce and distribute AIDS drugs are dramatically lower than the current market prices on these drugs, pharmaceutical companies have refused to cooperate with international initiatives to distribute medicines at low cost. A vast majority of the research conducted to produce the highly-active antiretroviral therapy (HAART) regimen was funded by taxpayers and research centers at major universities rather than by pharmaceutical companies. But that has not ceased the arguments by companies that their intellectual property rights are a priority over the health of the poor.

Drug	Form	Price	Production Cost	% Difference
Ciprofloxacin	250 mg tab	\$3.40	\$0.05	98
ddI	100 mg cap	\$1.80	\$0.50	72
EFV	200 mg cap	\$4.40	\$2.40	48
Fluconazole	200 mg cap	\$12.20	\$0.30	98
3TC	150 mg cap	\$4.50	\$0.30	93
NVP	200 mg cap	\$4.90	\$1.50	73
d4T	40 mg cap	\$4.90	\$0.20	96
AZT	100 mg cap	\$1.70	\$0.10	94
AZT+3TC	300+150 mg cap	\$9.80	\$0.70	93

**Figure 1:** AIDS Drug Price Comparison (Source: MSF, Update: December 2000).

Drug	Research and development funder(s)
Didanosine (ddI)	NIH
Lamivudine (3TC)	Emory, Yale
Nevirapine (NVP)	NIAID, NIH
Stavudine (d4T)	National Cancer Institute, Yale
Zidovudine (AZT)	NIH, NCI

**Figure 2:** Funders of research and development of major HAART medications (Source: Jim Yong Kim, Program in Infectious Disease and Social Change, Harvard Medical School: November 2000).

While UTR recognizes the need to continue ongoing debate over global drug distribution policies, the organization also realizes that 36.8 million people who currently suffer from the disease are likely to die if immediate initiatives are not taken. To aid the current crisis, UTR members have organized a nationwide initiative to distribute AIDS drugs to poor persons who live in impoverished conditions. AIDS patients in the United States regularly receive drug “cocktails”—mixtures of various HAART medications that synergistically combat the HIV virus. Some patients change their cocktails and possess unexpired antiretrovirals that they will no longer need. These extra drugs are often thrown away. But UTR members have conducted a legal review to determine that these drugs can be legitimately collected and reshipped to people in developing nations.

After compiling a database of over 200 HIV/AIDS community care centers and campus organizations around the United States, UTR members gathered drugs from locations as distant as Palo Alto and Atlanta and paid for their shipment to MIT, where they were sorted and transported to Haiti. In Haiti, these drugs were delivered to the physician's organization Partners in Health (<http://www.pih.org>), which runs the model "HIV Equity Initiative" using a treatment program known as directly observed therapy administration of highly-active antiretroviral therapy (DOT-HAART). The DOT-HAART regimen overcomes the difficulties of treating AIDS patients in the developing world by using community health workers and close observation practices to prevent cross-culture difficulties, viral resistance, and denial of treatment due to inadequate medical supplies. Based on the efficacy of the HIV Equity Initiative in Haiti, several medical programs have now recommended that DOT-HAART be adopted worldwide. The AIDS patients treated in Haiti are now continuing to receive their medications through UTR's redistribution program.

At this point in time, the following medications have been shipped to these patients:

<b>Drug</b>	<b>Doses Delivered</b>
Videx (didanosine)	660
Ziagen (abacavir sulfate)	120
Zerit (stavudine)	660
Sustiva (efavirenz)	630
Combivir (lamivudine/zidovudine)	600
Epivir (lamivudine)	360
Viracept (nelfinavir mesylate)	12000
Crixivan (indinavir sulfate)	1260
<b>Total Doses</b>	<b>16290</b>

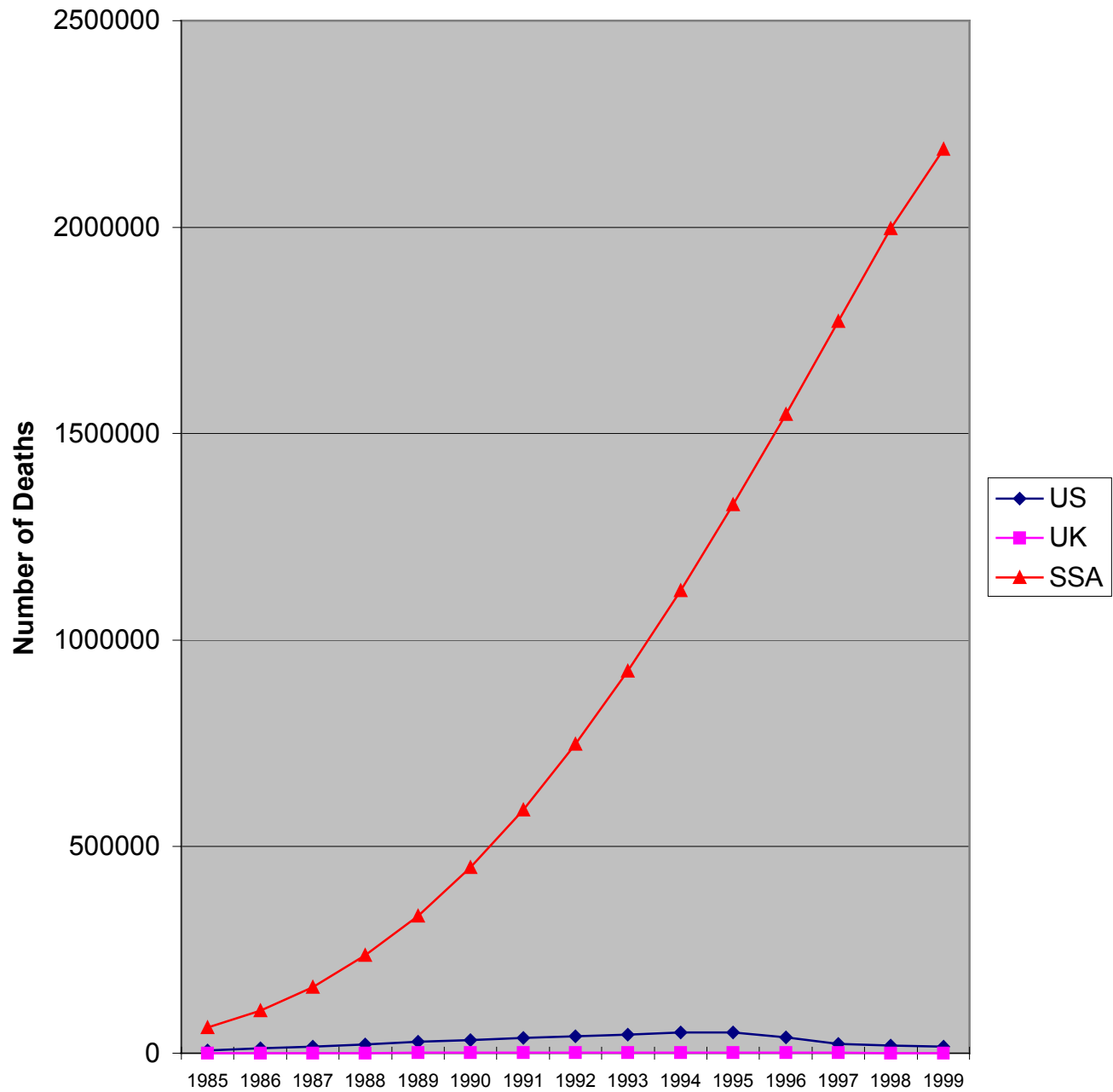
**Figure 3:** HAART medications delivered to Haiti by UTR.

## **FUTURE PROSPECTS: TANZANIA**

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While the treatment of AIDS patients in Haiti can provide for global change in policy through the adoption of DOT-HAART programs, the crisis faced by Africa at the current time also requires immediate action. UTR advisor Prof. Christine Walley has recommended that future UTR shipments be sent not only to Haiti, but also to Mafia Island in Tanzania, one of the poorest countries in sub-Saharan Africa. The ability to pay for treatment on Mafia Island is less than in other regions, and the Chole Health Center offers an avenue through which UTR-shipped medications could be administered and disseminated the medicines. UTR is currently working to send drugs through a complex international customs procedure in order to provide treatment through Chole's DOT program.

## Mortality Due to HIV/AIDS 1985-1999



**Figure 4:** HIV/AIDS-related mortality within the United States was curbed by the introduction of highly-active antiretroviral therapy (HAART). But the absence of the HAART regimen from sub-Saharan African (SSA) countries has led to skyrocketing death rates (Source: UNAIDS, 2000).

## [Hunger Relief Services]

### SUDAN

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Ongoing civil war and severe poverty in Sudan has hindered proper food distribution throughout the region. Three million Sudanese are currently threatened by starvation; approximately 600,000 are facing severe drought and another 2.4 million need immediate assistance as a result of the civil war. UTR's primary concern in the region is the World Food Program's ability to maintain food stocks, which will run out at the beginning of Sudan's dry season and result in mass migration as well as widespread malnutrition and starvation.

Late in the semester, UTR initiated a funding drive for the World Food Program (WFP), which continues to be the front-line agency in the fight against hunger in Sudan. The WFP program has a four-tiered initiative to:

1. Improve water access in semi-arid regions
2. Assist to primary school children by providing food rations
3. Provide large scale food rationing in drought stricken areas.
4. Transport food by air. The operation uses three main air bases, located in Lokichoggio (northern Kenya), El Obeid (central Sudan), and Khartoum. In Sudan, WFP airdrops and airlifts food aid using a fleet of six aircraft, including two C-130 Hercules, one Ilyushin-76, two Buffalo and one Antonov-12 aircraft. At the height of the 1998 crisis, WFP was operating the largest humanitarian airdrop operations in history, using over 30 aircraft daily.

Considering the high cost of airdrops, WFP flies food from the operational base nearest to the beneficiaries. This means that beneficiaries in northern Bahr el Ghazal in the Southern Sector are often served from the Northern Sector bases of El Obeid rather than from Lokichoggio in the Southern Sector.

Year	WFP Aid to Sudan
1998/1999	116,790 mt
1999/2000	125,155 mt
2000/2001	78,103 mt
2001/2002 (projected)	171,699 mt

**Figure 5:** WFP Aid to Sudan

WFP now needs over \$100 million dollars in assistance from the international community to help the three million affected Sudanese over the next 12 months.

Beneficiaries will include:

- Malnourished children and adults; pregnant mothers.
- Displaced persons trapped in garrison towns in southern Sudan with inadequate access of food.
- People who have lost their crops in the ongoing drought.
- Refugees selected for resettlement programs.

- Children facing exceptional circumstances: orphans, abandoned children and child-headed households.
- Disabled, elderly, widows and widowers.
- Food insecure populations suffering epidemics and chronic illnesses such as TB and Kala Azar.

To deal with the multi-faceted nature of Sudan's hunger crisis, UTR fundraised over \$650 during the last week of the semester, which went directly to:

- Emergency relief: recovery from drought, war, and floods
- Rehabilitation programs: designed to rejuvenate Sudan's communities back after a crisis.
- Long-term development projects: free aid gives people, especially women and children, the chance to devote their time and energy to development opportunities such as primary school education.

## **FUTURE PROSPECTS: AFGHANISTAN**

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Due to two decades of war, Afghanistan is suffering from a major hunger crisis. On a scale of potential humanitarian disasters worldwide, Afghanistan has surpassed the situations in all other regions including North Korea, the Congo, and Burundi. As summer approaches, a lack of adequate sanitation becomes dangerous and the risk of epidemics increase. According to the United Nations, some 800,000 Afghans have left their homes since early last year because of factional fighting and drought. Around 170,000 have fled to neighboring Pakistan, which says it is unable to accept any more. Most of these Afghans are fleeing drought, the worst in 30 years, and fighting between the ruling Taliban and the Northern Alliance opposition. Islamabad insists that the United Nations should open more camps in Afghanistan. Six U.N.-run camps in Herat held a combined 110,000 people, with 65,000 of those in Maslakh, the largest camp and the only one that is accepting new arrivals. There are now about one million Afghan refugees in Pakistan, along with an estimated two million illegal immigrants. The worst drought in three decades has destroyed most crops and wiped out entire herds in Afghanistan. People in remote mountain villages, who have used up their food supplies, are leaving their homes in search of food and water.

UNHCR's contribution to Afghan refugees is dropping to as low as one dollar per week per refugee, so UTR is looking to alternative agencies through which aid might be delivered and asks its advisors for recommended agencies. A current list of potential collaborators includes the Global Relief Foundation (<http://www.grf.org/emergency-afghandrought.html>), Mercy-USA (<https://www.mercyusa.org/>), and the Benevolence International Foundation (<http://www.benevolence.org/>).

## [Local efforts]

### **SWEATSHOP LABOR**

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In October 2000, five universities finalized the Independent University Initiative (IUI), a study into working conditions at factories producing collegiate apparel. The results were appalling, and included numerous labor violations and code of conduct breaches within production facilities. Awareness of the codes was also very limited, and monitoring efforts were not sufficient to promote compliance. It was revealed, in fact, that the tendency of individual schools to each adopt their own codes of conduct also inhibited universal compliance efforts.

Many schools, both prior to the IUI study and afterwards, have taken a number of steps to keep their licensed products sweat free. Many, including MIT, have adopted the code of conduct produced by the Fair Labor Association (FLA), while more strongly committed schools have also become affiliated with the Workers Rights Consortium (WRC). The specific details of such affiliations and their implications for MIT have been researched by UTR member Julia de Kadt, who has produced a thorough website on the issue (<http://web.mit.edu/juliad/www/sweatshops/home.html>).

At MIT, the only safeguards against sweat free clothing are through Barnes & Noble, which operates the Coop. Unfortunately, the company fails to enforce their regulations. In addition to pressuring Barnes & Noble to enforce their rules, MIT should adopt new standards to ensure that its licensed products remain sweat free. Later this summer, UTR members will be joining with other students and professors in a joint venture with the Technology & Licensing Office (TLO) to discuss the adoption of WRC rules for MIT-licensed clothing.

Beyond this immediate action, UTR will also discuss the potential for MIT to pursue two means of anti-sweatshop advocacy:

- 1) By working together with other schools in order to effect change in how collegiate apparel is produced, and
- 2) By making use of the intellectual capital on which MIT prides itself by investing in research and new initiatives that work towards improving labor conditions and human rights in the apparel industry.

### **FUTURE PROSPECTS: COLOMBIAN REFUGEES**

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Colombian refugees have been fleeing to Boston suburbs en masse, mostly to escape from the government-supported paramilitary groups who terrorize the civilian population in Colombia and steal land for the wealthy. Many of these illegal refugees face deportation and are likely to be killed if they return to Colombia. But the United States government has refused to grant these refugees amnesty, primarily because the U.S. supplies weapons to the very government from which these refugees are fleeing; a granting of amnesty, in other words, would comprise an admission that the U.S. was funding a group of human rights violators.

UTR intends to advocate for the granting of amnesty to these refugees by mobilizing a local political consensus around the issue. During the advocacy process, UTR members also plan to coordinate projects with local NGOs and provide direct services to these Colombians in order to make their stay in the United States safe and secure. Recommendations and assistance from UTR advisors is appreciated.

## [Relevant Reading]

Amnesty International Papers on Sierra Leone

-Cutting the link between diamonds and guns

Available at: <http://web.amnesty.org>

Harvard University Consensus Statement on Antiretroviral Treatment for AIDS in Poor Countries

-Signed by Individual Members of the Faculty of Harvard University

Available at:

[http://www.cid.harvard.edu/cidinthenews/pr/consensus\\_aids\\_therapy.pdf](http://www.cid.harvard.edu/cidinthenews/pr/consensus_aids_therapy.pdf)

Human Rights Watch World Report 2000

-Entry on Afghanistan

Available at: <http://www.hrw/wr2k/Asia.htm#Afghanistan>

Kim, Jim Yong (ed.), *et al.*

-Dying for Growth: Global Inequality and the Health of the Poor  
Cambridge: Common Courage Press, 2000.

Oxfam United Kingdom "Cut the Cost" Series

-Patent Injustice: How World Trade Rules Threaten the Health of Poor People

-Dare to Lead: Public Health and Company Wealth

-Fatal Side Effects: Medicine Patents Under the Microscope

Available at <http://www.oxfam.org.uk/cutthecost/>

Partners in Health paper on DOT-HAART therapy

-Community Based Approaches to HIV Treatment: DOT-HAART in Resource-Poor Settings

In press, *Lancet*.

Reliefweb Situation Report on Sudan

-Drought Appeal No. 11/01, covering March 2-April 5, 2001

Available at: <http://www.reliefweb.int>

*The Washington Post* Series on AIDS in Africa

-Five part series on pharmaceutical companies and AIDS drug distribution

Available at: <http://washingtonpost.com/wp-dyn/world/issues/aidsinafrica/>

United Trauma Relief Reading Resources

-Papers and news items on all UTR projects and affected countries

Available at: <http://web.mit.edu/utr/www>

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