

The Culture of Haitian Medicine:

Route 87



Nerlie Pierre
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Dr. Fran Barg
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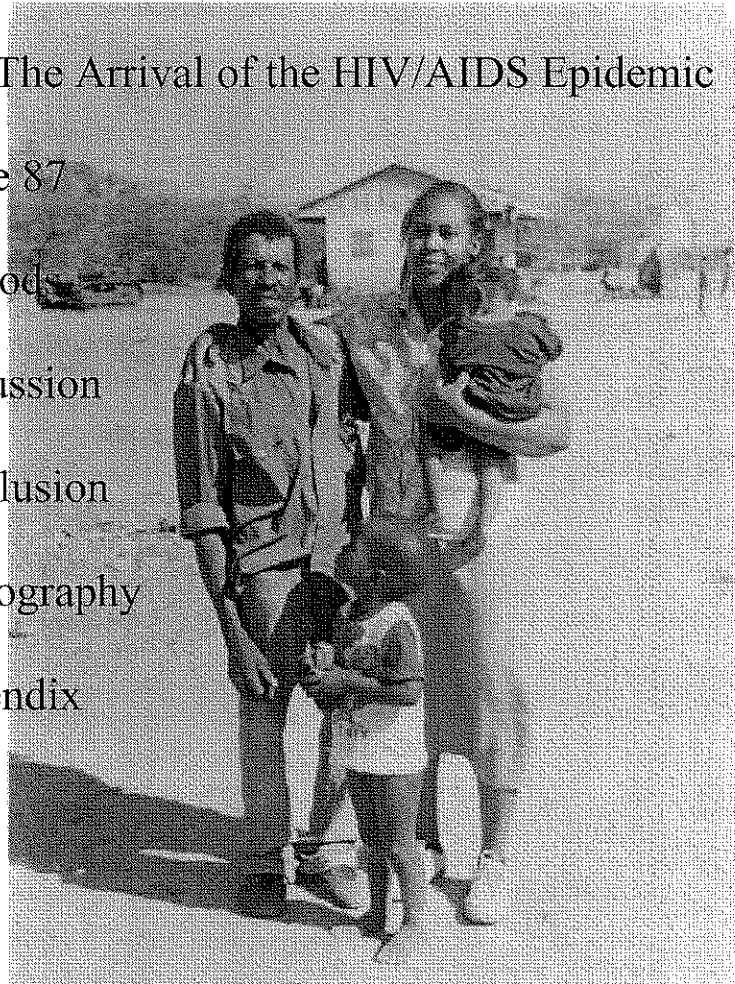
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Abstract

Culture is defined as “the integrated pattern of belief, and behavior that depends upon the capacity for learning and transmitting knowledge to succeeding generations.”³⁴ Medicine is described to be “a substance or preparation used in treating disease.”³⁴ Hence, the culture of medicine is understood to be specific beliefs, practices, language, and methods of treating disease that can be transmitted from one generation to the next. The culture of medicine varies greatly among continents, countries, states, cities, towns, neighborhoods, homes, and individuals. Route 87, a small town in Haiti exhibits perfectly this phenomenon. Surrounded by progressing cities, this impoverished sector of Haiti remains distinct in its lifestyle, beliefs, and medical culture. Through contact with the founders of a United States outreach organization, based in Haiti, called *Fondation de Secours Internationale Haïti*, I have used the techniques of medical anthropology to learn about the town. From what is known, Route 87 is an impoverished sector of an already impoverished country that endures many of its repercussions—unsanitary conditions, poor quality foods, poor hygiene, exposure to undetected disease, etc. However, the members of this sector experience less disease outbreaks than the remainder of the country. Throughout this paper, I will discuss the history of traditional and Haitian medicine. I will also discuss the illness that plague Haiti, the influence of the HIV/AIDS epidemic during the 1991 coup d'état and how Route 87 locals don't seem to experience these outbreaks. Lastly, I will expose Route 87 culture, practices, and what is currently known about the medical system by drawing upon the social, biological and linguistic factors that will help me understand and to explain the reason for this disparity in disease and health.

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Introduction

Route 87 is located between Mont Rouis and Saint-Marc²³. It is one of the most impoverished sectors in the poorest country in the western hemisphere—the Republic of Haiti. At a glance, this area presents itself as a desert waste land; however it is inhabited by roughly sixty (60) children and their parents. Formerly unbeknownst by my relatives in Mont Rouis and their neighbors, the people of Route 87 have managed to survive on about 70- 80% less of what the average Haitian has. With the lack of access to a biomedical clinics/hospitals, or a local voodoo priest/ priestess/doctor, the locals have seemed to acquire their own culture of healing methods. Their own culture of medicine, devoid of the learned, broad, artificial, rapid and predictable convoluted nature of traditional western medicine, and the inherited, personal, dual, thorough, and unpredictable nature of traditional Haitian medicine.

The History of the Republic of Haiti

The native Arawak Amerindians - who inhabited the island of Hispaniola when it was founded by Columbus in 1492 - were nearly annihilated by Spanish settlers within 25 years. In the early 17th century, the French also established a presence on Hispaniola. In 1697, Spain ceded to the French the western third of the island - Haiti. The French colony became one of the wealthiest in the Caribbean, based on forestry and sugar-related industries¹. However, it became so only through the heavy importation of African slaves and considerable environmental degradation. Haiti's nearly half million slaves revolted

under Toussaint L'Ouverture, in the late 18th century. Following a prolonged struggle, Haiti became the first black republic to declare its independence in 1804. For most of its history Haiti has been plagued by political violence. Currently, it is the poorest country in the Western Hemisphere.

Occupying one-third of the island of Hispaniola, Haiti is located in the Caribbean Ocean. Haiti has a current population of 8 million. Bordered by Atlantic Ocean on the North, and the Caribbean Sea on the South, Hispaniola is of a tropical climate. The country is populated with about 8 million inhabitants and has the lowest per capita income in the Western hemisphere. Poverty is as a result of a matrix of overpopulation, high unemployment rate (60%), high and accelerating inflation rate, high illiteracy rate (55%), destruction of natural resources, no industry or exports, and little viable industrial and government infrastructure.²⁵ This has led to extremely high infant mortality and child death rates, and short adult life spans. The health status of Haitians is in the bottom 20% of nations worldwide, hence the full life expectancy of the Haitian is 52.1 and 57.3 years for men and women, respectively.

The History of Haitian Medicine

“The Flower of the Antilles”²⁵ (as they called it) was blessed in almost in every facet by nature. For many years, however it has been exploited by man with little regard for anything else than profit. For 292 years, slavery pervaded the island. With the slave

trade came every type of African disease that began to take root in Haitian soil, and customs, like voodooism that hindered rational disease prevention.

Haitian was under the control of the French government. Disease caused such ravages in the French army that it led to their eventual defeat²⁵. And, the island gained its independence in 1804 upon the death of the French commander due to the infection of yellow fever.

Among the rural regions the populations suffered from malaria, yaws, and intestinal parasites. During 60 years of exploitation by the Spanish, several inhabitants died from forced labor, murder, and disease. Smallpox (only disease not brought from Africans, but from Caucasians) was the main cause of death for some 200, 000 within 10 years of the arrival of Christopher Columbus in 1492. Yaws was the greatest physical curse to Haiti. It was referred to as “the blood brother of European syphilis, if not the same disease modified by age incidence, social environment, and racial difference.”²⁵. Until 1922 and the advent of Dr. Wilson, this illness did not seem to be recognized for its severity. He suggested that the first necessity in disease prevention be an improvement in sanitation.

Biomedicine in Haiti

Although western-influenced medicine is not presently practiced in the town of Route 87, biomedical clinics and hospitals can be found in surrounding cites, such as Pierre Payan. In his book, *Medicine and Morality in Haiti: The Contest for Healing*

Power, Paul Brodwin states that biomedicine is seen as invasive and virtually the source of all evil in Haiti. Brodwin notes further:

“The narrow physical emphasis of Western medicine, it is claimed, has a powerful effect on individual subjectivity (Gordon 1988). By locating pathology in the individual, and treatment in private settings divorced from everyday life, biomedicine weakens alternate accounts of the social sources of suffering and health. Biomedical knowledge de-socializes disease, and thereby authorizes the particular 'truth' that diseases are biological events, arising through impersonal, natural laws, rather than social ties and interests. Biomedicine thus helps construct the individual as an autonomous subject -- a center of cognition and feeling -- who exists against a background of facts and material objects (Comaroff 1982)”

Few Haitians have access to or choose modern/western medicine when they are ill. Thus, Haitian medicine is composed mainly of leaf-doctoring and herbal cures. Virtually every Haitian person would prefer this system of healing to any other and that the primary reason it is not the dominant system of healing as it is in the developed world, is that it is too expensive and not as widely available. Although access to a modern medical facility may be a car or donkey ride away, the typical Haitian much rather serve the loa (ancestor spirits associated with the practice of voodoo) or the local docteur feille (leaf doctor) in their search for healing. In a study comparing the folk medicines of Ozarkians in Missouri and Haitians, Bonnie Thomas- Stevenson exposes various herbs and their

similar uses within the two cultures. A chart of these herbs and uses can be viewed in the index.

There is a strong emphasis placed on the blood in the body in traditional Haitian medicine. Besides the instinctual, the blood is watched by looking into the eyes, checking the fingernails, behind one's ears and through skin eruptions and bleeding. Alterations in coloration, volume, quantity, directionality, temperature and purity of their blood raises much concern within this community.

A practitioner of western/biomedicine in Haiti is usually a person of middle and upper class members of society. They are often the ones that can afford the expensive tuition of Haitian schools. To train, students must enroll into a domestic or international medical school that concentrates on western medical practices.

Folk Medicine in Haiti

In *Medicine and Morality in Haiti: Contest for Healing Power*, Paul Brodwin exposes that a Haitian patient must first consider to what extent that his/her actions may be responsible for the illness that he/she is experiencing. This notion of a patient contributing to his/her susceptibility to illness is revealed when Brodwin introduces illness in the Haitian culture as "Illness of God" and "Illness of Satan."⁸ The criterion that divides the two is based on whether the illness can be cured by biomedical practices. An Illness of God is considered of natural causes where no fault or blame falls on the sick

individual. Hence, such an illness is deemed morally neutral. These illnesses are curable via biomedical practices.

A sickness of Satan can not be healed by biomedicine. There are three manners in which it is believed that an illness of Satan can be healed--the Roman Catholic Strategy, Voodoo Strategy, and Fundamentalist Protestant Strategy.⁸

The Roman Catholic Strategy position can go either way, but usually seems to decide the patient is an innocent victim. The manner in which illness is handled is through prayer and exorcisms of evil spirits. The Voodoo Strategy centralizes on the notion of a “sent sickness”—an infirmity sent unto a person as a curse. It is believed that a patient with such a sickness may well have done something rather vile to have induced someone to send it. Hence Haitians that use this method of healing, focus on driving out the “sent sickness” with the help of a houngan or mambo (voodoo priest or priestess, respectively).⁸ The lwa (spirits of ancestors) are also involved in this healing process. The houngan or mambo is often possessed with them during a ceremony. The Fundamentalist Protestant Strategy assumes that the patient is guilty of some wickedness most likely of not having given up the lwa, the practice of voodoo or the closely associated religion of Catholicism, for these are taken by the fundamentalists as a serious moral failing. These views prove to be contradictory in believing what causes an *Illness of Satan*, however it is quite common for people to utilize several healing strategies at the same time.

Disease in Haiti

The impoverished and often unsanitary conditions of several areas in Haiti, lead to various types of infections. A person can become infected with an illness via insect or animal bites, the air, from unsanitary water or foods, or sexual transmission.³⁹

Insect infections include Malaria, Dengue, Yellow Fever, Encephalitis (from mosquitoes), Mansonellosis (from biting midges), and Typhus (from lice and fleas). Dogs, cats, and other domestic and wild animals can transmit Rabies through bites and scratches. Brucellosis, “Q” fever, and Anthrax are found n goats, sheep and cattle. Respiratory tract infections include colds, influenza, strep throat, tuberculosis and sinusitis. Meningitis is transmitted directly through droplets from the nose and throat of infected people. Sexually transmitted diseases include gonorrhea, syphilis, genital warts, herpes, hepatitis B infection, and infection with HIV/AIDS. Other diseases include hookworms, whipworms, snail fever (Schistosomiasis), and mud fever (Leptosirosis)³⁰.

Lymphatic filariasis (LF)

Lymphatic filariasis (LF) is a disease of the tropics caused by infection with any of several round, thread-like parasitic worms. It is a debilitating and parasitic disease transmitted from one person to another by infected mosquitoes. A disease closely related to poverty, LF has not affected anyone in the town of Route 87, and this phenomenon is not yet explained. Most commonly, the infection is due to a parasite that resides in the

lymph system. LF is a principal cause of disability in over eighty (80) countries and territories. It affects people from 39 countries Africa, 3 in the Eastern Mediterranean, 8 in Mekong, 9 in South Asia, and 7 within the Americas.¹³ More than one billion individuals live at risk of infection, and it has already led to the disability of 120 million people. Within the Americas, Costa Rica, Suriname, and Trinidad and Tobago displaying great progress towards complete absence of LF among their inhabitants. Of the remainder, Haiti ranks as one of four countries (along with Brazil, Dominican Republic, and Guyana) that are affected with ongoing lymphatic filariasis (LF) transmission.

Treatments of LF also include a dosage of medicine that kills circulating larvae and adult worms, soap and water and skin care to prevent secondary infections, and elevation, exercises, and pressure bandages to reduce swelling. However, further action needs to be taken to aid Haiti out of their impoverished state. After research, I have found that both the economy and medical systems have to be improved simultaneously in order for any changes to take hold, for poverty had a direct negative impact on Haiti's medical system. I propose three new methods of research on achieving the goal of helping Haitian citizens fight against illnesses like LF and live healthier and longer lives. We need to explore the relation between the Haitian diet and obesity in discovering genetic factors that may predispose Haitians to LF. Secondly, excess research should be performed to further reveal the correlation between poverty and LF. Lastly, it is important examine spiritual, supernatural, and psychological components of LF that may exist.

Once infected with LF, the adult worm lives in the person's lymph vessels. The females release large numbers of very small worm larvae, which circulate in an infected

person's bloodstream. When the person is bitten by a mosquito, the insect can ingest the larvae of the parasite. This permits the parasite to develop within the mosquito and can be spread to other persons via the mosquito's bite. After the bite the cycle begins again; as the larvae passes through the skin, travels through the lymph vessels and develop into adults with a life expectancy of 7 years. The parasite responsible for LF in Haiti is the *Wucheria bancrofti* spread mainly by the *Culex* mosquito. The *Brugia malayi*, and the *Brugia timori* (found in Southeast Asia) are two other parasites that cause filariasis.

Long-term exposure and repeated infections can cause severe damage to the lymph system and cause devastating complications. Because most of the signs and the symptoms of filariasis are caused as a consequence of the adult worms living in the lymph system, tissue damage caused by the worms restricts the normal flow of the lymph fluid. Symptoms can appear between 5-18 months after contamination. Indications of LF are usually swelling, scarring, and infections (mostly in the legs and groin). LF is rarely fatal; however it can lead to recurring fevers, severe inflammation of the lymph system, and a lung condition called Tropical Pulmonary Eosinophilia (TPE). It can also lead to Elephantiasis: a condition that causes the legs to become grossly swollen¹³. This causes long-term disfigurement, and decreased mobility. In addition, LF can lead to a disfiguring enlargement of the scrotum called Testicular hydrocele.

There is 85% of Haiti's population that live in areas at risk of LF transmission. Haitians view illness in one of four ways. Illness can be attributed to natural causes outside the body such as cold, heat, winds, or humeral imbalance. Haitians also believe

that alterations in eating habits may cause illness. In junction with the belief that a weakened relationship with God causes a weakening of the body, illness is also viewed as malediction or punishment from God. Lastly, some illnesses are thought to be a cause of expedition, or “sent illness”. However, these can be further categorized into *Illness of God*, or *Illness of Satan*. An *Illness of God* refers to illness considered to be morally neutral where no blame falls on the sick. It is “natural” and can be treated by biomedical practices. An *Illness of Satan* cannot be healed by biomedicine and may be viewed as a curse or “sent sickness”. Physical deformities, such as that caused by LF, are thought to be the result of a spell brought on by an angry spirit that may have been conjured by an enemy³⁰.

Limited access to basic healthcare needs (clean water, immunizations, prenatal/obstetric care, or antibiotics) has been very influential on the Haitian perception of health and illness³⁰. Thus, a reliance on folk and spiritual explanations and treatments for illness may be the only option that they have ever possessed. Most likely a Haitian would have tried some traditional remedies before going to a cosmopolitan health care source, for the use modern healthcare sources for treatment is very uncommon. The use of traditional or magic-religious measures for treatment is most prevalent. These traditions are: Eating well (being of a plump size), sleeping well, keeping warm, exercising and keeping clean are important in avoiding weakness, maintaining the equilibrium between “hot” and “cold” factors, enemas for the purpose of cleansing the inner body from impurities, herbal teas and massage are used for treatment in the early stages of illness, spiritual and Voodoo practices are used to prevent harm and illness.

The Lymphatic Filariasis Support Center at the Rollins School of Public Health in Georgia, noted that the percentage of people at risk to LF in Haiti is 75%. The percentage of the population that is effected currently is 30%. Madsen V. Beau De Rochars et al. state that virtually the entire country is at risk after extensive tests and research of 22, 365 children from over 50-250 schools in the area. More than 50% of Haitian preschoolers are malnourished which leave them more susceptible to contracting chronic illnesses such as LF. The disease is virtually undetectable in children and little is known about its clinical manifestations in the pediatric population. The development of the worms are rather slowly in the lymphatic system, thus infection is not usually apparent until four or five years of age. However, swollen lymph glands may be observed as early as two years of age. The recent use of ultrasound equipment is the can detect at an earlier stage. It is at about seven years of age when 30% of infected children will begin to show ultrasound-detectable, irregular ballooning of lymphatic ducts and swollen lymph glands.

At the age of 13, girls start to exhibit the clinically visible signs of infection of the leg's lymph vessels. They are predisposed to lymphoedema—an abnormal accumulation of lymph fluid in the tissues causing the swelling of a limb, following further cumulative damage to the lymphatic drainage system. The condition can worsen to a painful and disfiguring swelling of the leg, arm, breast, or genitals called Elephantiasis. This condition can lead up to several times the normal size with thickening of the skin in adulthood. Boys display clinically visible signs at the age of eleven. Like girls, boys experience the aforementioned symptoms of LF. However, most commonly boys exhibit

the ballooning of the lymphatic vessels in their scrotum. At the age of 13, hydrocele may start to develop. This is a fluid-filled, balloon-like enlargement of the sacs around the testes. At adulthood, scrotal nodules often develop, and further infection can lead to the massive enlargement of the scrotum and gross deformation of the penis.

LF remains prevalent also due to a lack of advanced methods and medical tools and equipment in Haiti. Thomas G. Streit, Research Assistant Professor at the University of Notre Dame in Indiana, has partaken in primarily field-based research in Haiti, and worked collaboratively with ministry officials in the neighboring Dominican Republic. Haiti suffers from the highest hemispheric prevalence of the disease (up to 60% among focal populations), and as a primary focus of efforts to discern and fine-tune effective elimination strategies over the next few years. Streit states: "Because elimination tools currently available can target only an immature stage of the etiologic agent *Wucheria bancrofti* as well as the vector, control and elimination programs will require indicators of success or failure during the very long-term control campaigns necessitated by the 8 year life span of the adult parasite reservoir." Thus, he heads a pilot community control program involving mass chemotherapy for the interruption of transmission.

The Lymphatic Filariasis Support Center has set the goals of eliminating LF from Haiti, and decreasing suffering from and worsening of LF-related disability. There is yet a vaccine to be discovered for Filariasis so, the organization's objectives are to provide mass treatment so that all areas with prevalence greater than 0.1% will be treated by 2008, facilitate behavior change among infected individuals, and provide the de-worming

benefits of albendazole to endemic communities, which will promote the healthy growth of children. In achieving these objectives, they plan to expand mass drug administration (MDA) campaigns, complete morbidity surveys, increase the number of community-based support groups, and continue operational research to optimize patient care and, monitoring and evaluation techniques.

The Ministry of Public Health (MOPH) has constructed a national coordinating center for the LF program, joined with four (4) technical subcommittees. The methods are mass treatment, clinical care, social mobilization, and a once-yearly dosage albendazole and diethylcarbamazine (DEC) pills, or DEC-fortified salt. The mass drug administration (MDA) campaigns have been active in Leogane, Haiti since 2000. The current program (2003-2008) aims to treat ~6 million people world-wide. In the attempt to interrupt transmission in three implementation unit, DEC-fortified salt is used. LF elimination programs exhibit promise to reducing the burden of filarial infection. In the study discussed in *The Leogane, Haiti Demonstration Project: Decreased Microfilarema and Program Costs After Three Years of Mass Drug Administration*, it was observed that after only three rounds of DEC-albendazole treatment, residents of Leogane, Haiti experienced dramatic reductions in both filarial and geohelminth infections while achieving concurrent gains in program cost and efficiency. As a result, broad public benefits are being realized through the program's implementation. David G. Addiss et al. note that single-dose ivermectin can greatly reduce the concentration of *W bancrofti* microfilaria in the blood for 6-24 months. This decreases the uptake of the parasite by the mosquitos. It was discovered further that children that were simultaneously treated with

ivermectin and albendazole seem to be more effective than ivermectin alone. In a study conducted to assess filarial infection levels in the mosquito (*Culex quinquefasciatus*) through polymerase chain reaction (PCR), David S. Goodman finds that a single round of mass treatment would have a significant impact on transmission of lymphatic filariasis.

For social mobilization, posters, flipcharts, radio spots, songs and lymphedema treatment materials have been modeled in Haitian Creole (less formal than French), for the literacy rate is 48% for males, 42% for females. In addition, a simple, sensitive and specific test for antigen- detection test is available. This is called the ICT. It can detect infection within minutes, and be administered any time of the day (unlike previous tests).

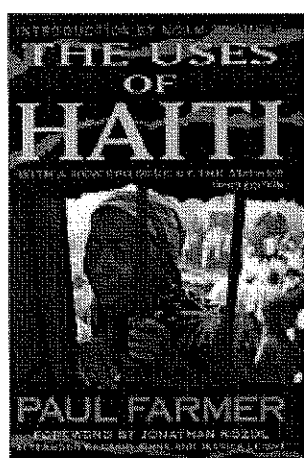
To assure that health workers had the appropriate experience in dealing with LF patients, conferences and training sessions were held in for private physician in Haiti. In 2002, a conference was held focusing on the epidemiology of the disease and the objectives of the national elimination program. A training manual was also developed for physicians-in-training to inform them regarding LF and the lymphedema and urogenital disorders that can ensue. Within that same year, Haiti hosted an international conference on urogenital ultrasound and surgery. There was a total of 15 training sessions. 2,300 health care workers were informed and educated about the different components of the program.

There are also geographical components to explaining the prevalence of LF in Haiti. Haiti's terrain is rather mountainous. In the article, *Community- and Individual-*

Level Determinants of Wuchereria bancrofti Infection in Leogane Commune, Haiti,

Heather A. Boyd et al. state that LF infection prevalence decreased with increasing altitude. The greatest force of infection is present in sectors of Leogane that are below 70 meters above sea levels; however LF is not exempt from communities at higher altitudes.

The Arrival of the HIV/AIDS Epidemic (according to Paul Farmer)



The HIV/AIDS epidemic is widely spread throughout the land of Haiti. The Lack of medical care and access has left much of the illness undetected by many. The people of Route 87 are very much impoverished, and lacking in medical access as well, however they have not had an HIV/AIDS death in its records since the introduction of external aid. Paul Farmer does an excellent job of explaining how the epidemic has spread throughout other areas in Haiti, and its effect on the nation.

The Uses of Haiti by Paul Farmer is a prime sample of an ethno medical approach to medical anthropology. The ethno medical approach is used by Farmer to adequately

expose the manners in which North American (principally the United States) society has made impressionable contributions to the current impoverished state of Haiti. He uses various examples of occurrences between the two governments and cultures to verify his claim. For instance, he emphasizes the current of events after the 1991, Cedras coup d'état of President Aristide throughout the entire piece of literature, and describes from first hand accounts how American government further increased the already declining state of Haiti.

Farmer states that the coup of 1991 (the plot to overthrow Jean-Bertrand Aristide as President) was expected. Preceding his election in December 1990, the supporters of the previous president, Jean-Claude Duvalier, were planning the rebellion. In the very early parts of his term, Aristide established much economic reform. During the next months, he was focused on discouraging Haiti's dependence on the industrialized countries of the North. Focusing on ceasing the drug trade (i.e. the zombie powder), Aristide ignited fury even among his once supporters. Stopping the drug transshipment through Haiti would directly affect Haiti's class of elites, and they would not stand for it.

Indeed the rebels achieved their goal; Aristide was forced out of office and the country, Supreme Judge Jean-Jacques Honorat was his replacement, and the General Raoul Cedras and the army were governing the country via terrorism.

During this time, the once difficult Haitian life became much more challenging, even unbearable. Farmer explains that many Haitians were fleeing to seek refuge in

America. “ Sadly, the Haitian people find themselves in a position of needing to reach the hearts and minds of North Americans and to persuade them to change the policies that affect Haitians so directly,” alleged Farmer. However, the Bush administration adamantly stood against harboring them. As refugees escaped their country on boats, they were forced to return by the U.S. Coast Guard, or captured and sent to Guantanamo (a U.S. naval base in Guantanamo Bay, Cuba) for treatment for HIV/AIDS. At the time, the virus was spreading rather quickly and much of the American press was responsible for spreading the myths that stigmatizes Haiti as the source of the virus. They displayed “Haiti as a source of infection or boat people, Haiti as the typical other, Haiti as confirmation of the worst racist theories, Haiti as exemplifying a ‘cultural problem’...”¹⁵ (216) . Although Farmer assures that all of the evidence points to the syndrome being brought to the island by North Americans or by Haitians returning from North America through sexual transmission and contaminated blood transfusions¹⁵ (280), “the press drew upon readily available images of filthy squalor, voodoo, and boatloads of disease ‘disease-ridden,’ or economic’ refugees.” Researchers like Jeffrey Viera observed that magic rituals sometimes involve the human or animal transfers of blood and secretions. He also learned that many voodoo priests are homosexual men that are in a position of power to satisfy their sexual desires in urban areas. Farmer argues that “there was never any evidence that the organism causing AIDS was endemic to Haiti, nor has there ever been the slightest evidence to back the idea that that voodoo practices played a role in transmission of an infectious agent”¹⁵ (280).

In his attempt to better exhibit the reality of Haiti's chaotic situation after the coup, Farmer shared the stories/testimonies of three Haitians that he had known since he began his work on the island in 1985. Two of them were Yolande Jean and Acephie Joseph. Yolande Jean was married with two children and a political refugee who was detained for a year at Guantanamo. Farmer explains that on her travels by sea to America, she collided with the U.S. immigration policy enforcers. They forced her and other refugees out of the boat, took their possessions and documents and burned them, and sent them to Guantanamo Bay, Cuba. There, the U.S. had established a concentration camp that Yolande conveys (to Farmer in an interview) the horrid conditions of the camp. "Conditions in the camp were grim," transmitted Farmer, "the inmates lived in tents and other makeshift shelters on a landing strip, surrounded by barbed wire...infested with rats, scorpions, and snakes¹⁵ (222)." The people were treated like animals, not even some animals were treated this badly. Yolande's situation was completely different from the HIV-positive detainees at the Santiago de las Vegas sanatorium. The women there were well nourished, had movie nights, and mother's day celebrations. Yolande, and her fellow Haitians were fed spoiled foods that were often infested with maggots. Although Guantanamo was owned by the U.S., the Bush administration declared that U.S. policy did not apply to Guantanamo, and there was nothing that they could do alter the situation. In eight months following the coup, 34,000 Haitians had been intercepted on the high seas by the U.S. Coast Guard, and the majority sent to Guantanamo.

Acephie Joseph battled with AIDS until the spring of 1992. She was raised in the poor area of Do Kay, Haiti. It was unknown in the rural areas as Kay of the new illness,

AIDS, for they were burdened by increasing political violence and unremitting poverty¹⁵ (264). Through her story, Farmer exposes the difficulties and risks-- more so health risks-- associated to poverty. Several poor women in Haiti have difficulties going to school and getting jobs, thus they must rely on marriage to escape poverty. Farmer describes "in rural Haiti, entrenched poverty makes the salaried man ever so much more attractive"¹⁵ (267). Following that credence, Acephie fell for a young married soldier and they became sexual partners. In less than a month, Acephie did not see him anymore, and soon heard that he was sick and in the care of his wife. Many could not understand his illness, and Farmer informs the reader that "it was widely agreed that he was a victim of sorcery, a 'sent sickness' ¹⁵ (268). 'Expedition of the dead' is a model of illness associated with voodoo. Haitians believe a sickness can be sent to another through a hougan or mambo (voodoo priest, or priestess). Many people in Kay thought it might have been his wife that sent an illness upon him. He died, and a couple of years later Acephie died of AIDS infection at the age of 27.

Route 87

Route 87 is between the areas of Mont Rouis and Saint- Marc, near the city of Pierre Payan. From the city of Mont Rouis, the location of *Fondation de Secours Internationale Haïti*'s storage bank, the truck ride require \$300 goud (approximately equivalent to the American dollar) in gasoline (a result of long distance, and higher gas price rates)²³. Although it is near the ocean, the sector does not have direct access to clean water. As a result, the ground is dry and rocky. There is very little vegetation, with

the exception of the skimpy trees that protrude out of the brick-like soil. Escaping the heat of the tropical sun seems virtually impossible, for shade is scarce beneath the gauzy leaves of the trees. The arid territory doesn't allow for much farming; however the locals have managed to harvest watermelons there, and not much of anything else. The land is so unfruitful that even animals stray away from it. The only animals spotted are the few goats that have been domesticated by the locals.

The history of the Route 87 locals is quite interesting and bizarre. The first people to arrive the town were Haitian natives from different areas of the country that were in search of employment. Years ago, Route 87 was the site for a big manufacturing factory. Young and old traveled there for work with the intentions of providing for their families back home, or preparing funds for their futures. Except for the wealthy that were able to afford housing on the shorefront, the workers built small shacks to house in during their time away from home²³. Seemingly, they thought these shacks to be temporary--- until they could earn enough money to return home and provide for their families. However, for most of the workers, their advancement towards a better life was stopped short.

For some reason, or another, the factory was forced to shut down, leaving many families without a source of income. As a result, those that could afford it headed back home to their families. Others couldn't; either they didn't have the means or a family to go to²³. Thus, the poor and the abandoned remained in Route 87 with no other beam of hope in sight.

Overtime, they formed families; bearing many children. Route 87 had evolved into a society that had acquired its own culture with social status classifications all of its own. The wealthiest member of this society is Esther. She owns a radio, a donkey, and is able to travel to Pierre Payan to work as a Madam Sarah (women that sell goods at the markets). She also owns the biggest shack and houses many people there. However, existing in a society composed of impoverished and homeless, the determinants of what defines a family of wealth in actors other than the level of education achieved, the amount of money possessed, the type of car driven, nor the brands of clothes worn. With the basic levels of education there is to offer, many of the locals aren't granted the privilege of learning a trade. No trade means no work in Haiti, and no work means no money. Hence, the people of Route 87 have little material things that exemplify the achievement of purpose and worth. However, one thing seemed to stand out in this community: there are many children. The average family has 6-8 children each. It seems that the community has adopted its own way of portraying success, apart from the remainder of the Haitian culture. The amount of children per family exemplifies success because it assures that the family lineage will be preserved, and increase the being well taken care of when they came of old age.

Over the years, families grew to a grand total of 27¹¹, yet there were no new housing developments. The families were forced to share the living space with each other to accommodate for the large amounts of children. The largest shack is shared amongst seven (7) families. The people are practically lying down upon each other. Such close proximity continues to contribute to the increase of births²³. Today, the shacks are

insufficient for all the family members to reside, therefore some of the older members sneak unto the porches of the wealthy, way by the waterfront, for shelter at night. If they are caught, they could face the penalty of death for trespassing.

Why would wealth neighbors allow their poor counterparts to live in such misery without reaching out to them a helping hand? That question boggled my mind for days. The residents by the shorefront went out of there way to avoid contact with Route 87 locals. Instead of traveling to and from the city by car, they travel by boat; away from the Route 87 roadside. However, in considering the current state of poverty and havoc that Haitian citizens find themselves in daily, it is easy to see that the entire country is filled with people in need. When a Haitian compares his lifestyle to that of an American, he becomes immediately aware of his unfortunate state, and believes that in attaining success he must retain all his possession to himself and his family members. Besides the close neighbor relationships found in a "lakou"³ (a focused area of houses that are inhabited by close friends and family members), the sharing of food and possessions is rare. Even rarer is the acceptance of help from other Haitians. Therefore, the people of Route 87 are left to fend for themselves independent of the help of their neighbors.

However, it seems that the community members had divine hand providing for them. The current mission administrators have recently been informed that another American church /non-profit group, like the *Fondation de Secours Internationale Haïti*, has reached out to the locals of Route 87 via a church in Haiti. Through that mission, the church was able to begin a small school and church for the area. At the school, the

children are taught to speak and write in French and Creole. Yet, they have been very inconsistent with the aid to the sector. The organizers *Fondation de Secours Internationale Haïti* speculate that the monies intended to help those of Route 87 were used in other ways. When that mission learned *Fondation de Secours Internationale Haïti*, they have returned to the site. The director of the mission, Marie Lolita Pierre, informed me that they have returned for selfish reasons. They are afraid of having the land owned and controlled by another organization. Thus, they have slowly began the development of new housing for them, but the lack of funds has dramatically slowed down the process and proves that this mission can not aid the people of Route 87 alone.

Therefore, *Fondation de Secours Internationale Haïti*, continue their outreach to the community. They focus on supplying them the essential things that will promote good nutrition and health; things such as food (both cooked and raw), toothbrushes and toothpaste, clothes, shoes, soaps and shampoos, lotions and pomades, and over-the-counter medications (i.e. aspirin). For the children, they also bring toys, and school supplies. When possible, the mission also distributes money to each family. Virtually useless within their society, the money helps with the travel expenses to the city when needed.

Methods

At the onset of my research, I set out to compare the healing practices/ methods of Route 87 to that of what is already known of traditional Haitian healing practices/ methods. I planned to travel to the site, however a sudden lack of funds and the news of

tourist kidnappings and concern for my safety refrained me from doing so.

Upon my arrival to the site, I intended to interview 25 of 38 of Route 87's adults on various questions that would render me more insight and concrete evidence on their attitudes toward illness and their treatments of them. Most of all, I wanted to understand how the people were able to remain in a state of health when the conditions that they live in work completely against it. After collecting the data, the responses of these 25 adults were to be evaluated and compared to each other. With these statistics, I planned to formulate a conclusion about their definition of illness, and healing rituals that they engaged in to treat them. Next, I would compare their views of illness to the traditional Haitian view of illness as either an *illness of God* or an *illness if Satan*. Furthermore, the healing methods would be compared and contrasted. Then, I would attempt to make a conclusion as to why disease was so uncommon in Route 87.

Instead, I interviewed the missions outreach coordinator, Reverend Pierre Sultan Dorsainvil (in Haiti), and the missions director, Sister Marie Lolita Pierre (in the US) to better evaluate the views of illness and treatment practices of the Route 87 locals. With the data collected, the views of illness and healing practices are compared.

Discussion

Interview w/ Missions Outreach Coordinator

From my phone interview with *Fondation de Secours Internationale Haïti's*

missions outreach coordinator, Reverend Pierre Sultan Dorsainvil, I gained much more insight into Route 87's medical system. Reverend Dorsainvil has worked with the town for the last three years, from the beginning of this initiative. He has served the community in several ways. He is the main distributor of the goods that come from the states. He controls the import of the goods from the cargo station, and assures that all the goods get to the town in its entirety. He also is a par-time Sunday school teacher at the church, and tutor for the children.

Reverend Dorsainvil notified me that the town had no local clinic and that the closest one was in the city of Pierre Payan -- a trip that would last a 4 to 6-hour walk/donkey ride. Travel to Pierre Payan is very expensive, and the hospital's services must be paid for up front. So, only in grave instances do the people transport the sickly to that hospital. Most serious cases are usually concerning young children that are in dire need of external medical attention¹¹. Women are not even transported during child labor. Reverend Dorsainvil trusts that there is a midwife in the community, but has not met her yet. In one case, an elderly man experienced a stroke that has left one side of his body paralyzed. No one bothered to send him to the hospital for treatment²³. Instead, the community has treated him through their own methods. Still paralyzed, the elder still seems alert and healthier than expected.

The community's displacement from the remainder of the country has caused them to form a substitute form of medicine that doesn't really match that of traditional biomedical or Haitian healing practices. Their traditions of healing centralize on herbal

extracts and teas. Recently, pain relievers (such as aspirin) have been introduced by the *Fondation de Secours Internationale Haiti* mission workers. They taught the locals when and how to ingest the medication. Before then, they would have to endure a painful headache, stomach ache, or joint pain by the consumption of tea, bed rest. Despite their limited access to advanced medical techniques and processes, the people of Route 87 rarely experience deaths as observed during the past three years. Yet, recently the community mourned the loss of a child that was unable to make it to the hospital time²³. It was not disclosed to Reverend Dorsainvil of what her sickness was, but it was evident that the illness was more potent than what the soothing nature of the herbs could handle.

According to Reverend Dorsainvil and the Sister Pierre, the community does not engage in voodoo practices. Therefore, there is no hougan or mambo there to aid with what would be considered a “sent sickness.” This leads me to hypothesize that the people may categorize illness much differently than the remainder of the people throughout the land. Biomedicine is expensive and scarcely available and the notion of *Illness of God* and *Illness of Satan* may not even exist. There is still much research to be done in Route 87 in the attainment of a complete understanding of their medical system.

Conclusion and Plans for Future Research

From what is currently known about Route 87’s medical system, it can be safely assumed that there it differs from that of the surrounding cities. Since the inception of the

Fondation de Secours Internationale Haïti' mission, there have been dramatic improvements in the appearance of the locals. The hair color of the children has darkened as a result of a decrease in malnutrition, everyone's personal hygiene has improved, and they are acquiring wardrobes.

I intend to further my research of Route 87's medical system. There are many questions that have been left unanswered-- What kinds of illnesses are experienced? What are the remedies and healing processes that exist, and how have they evolved over time? Why the practice of voodoo is abandoned, and is there a substitute? How is illness categorized?, etc.. that I intend to find the answers to and discuss in a later report.

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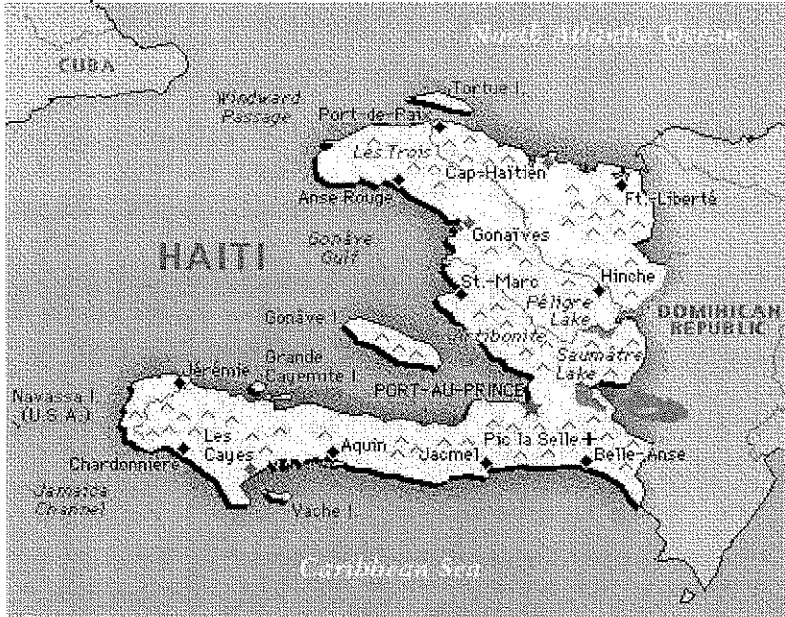
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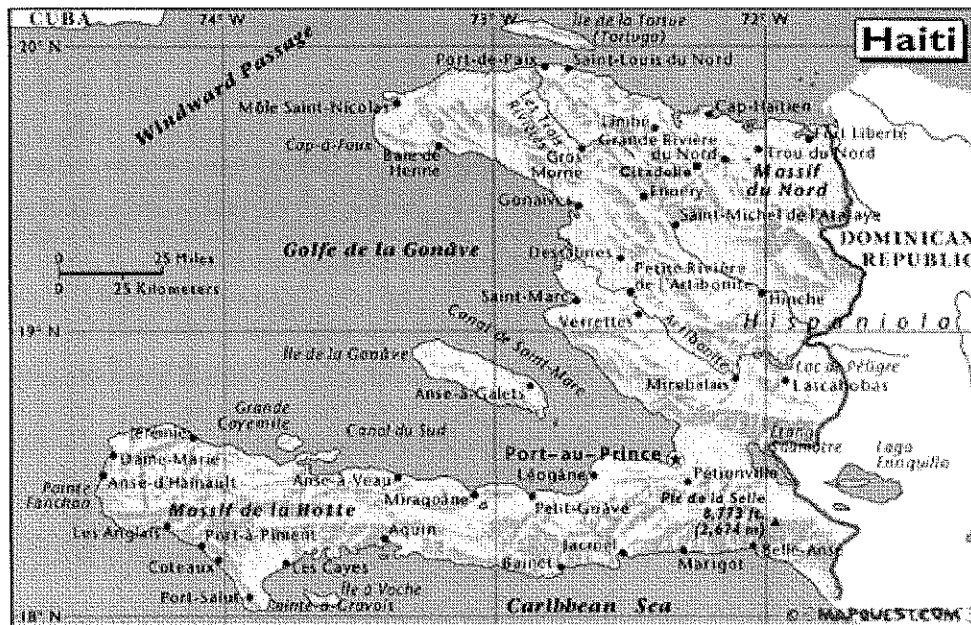
Appendix

1. Map 1



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2. Map 2

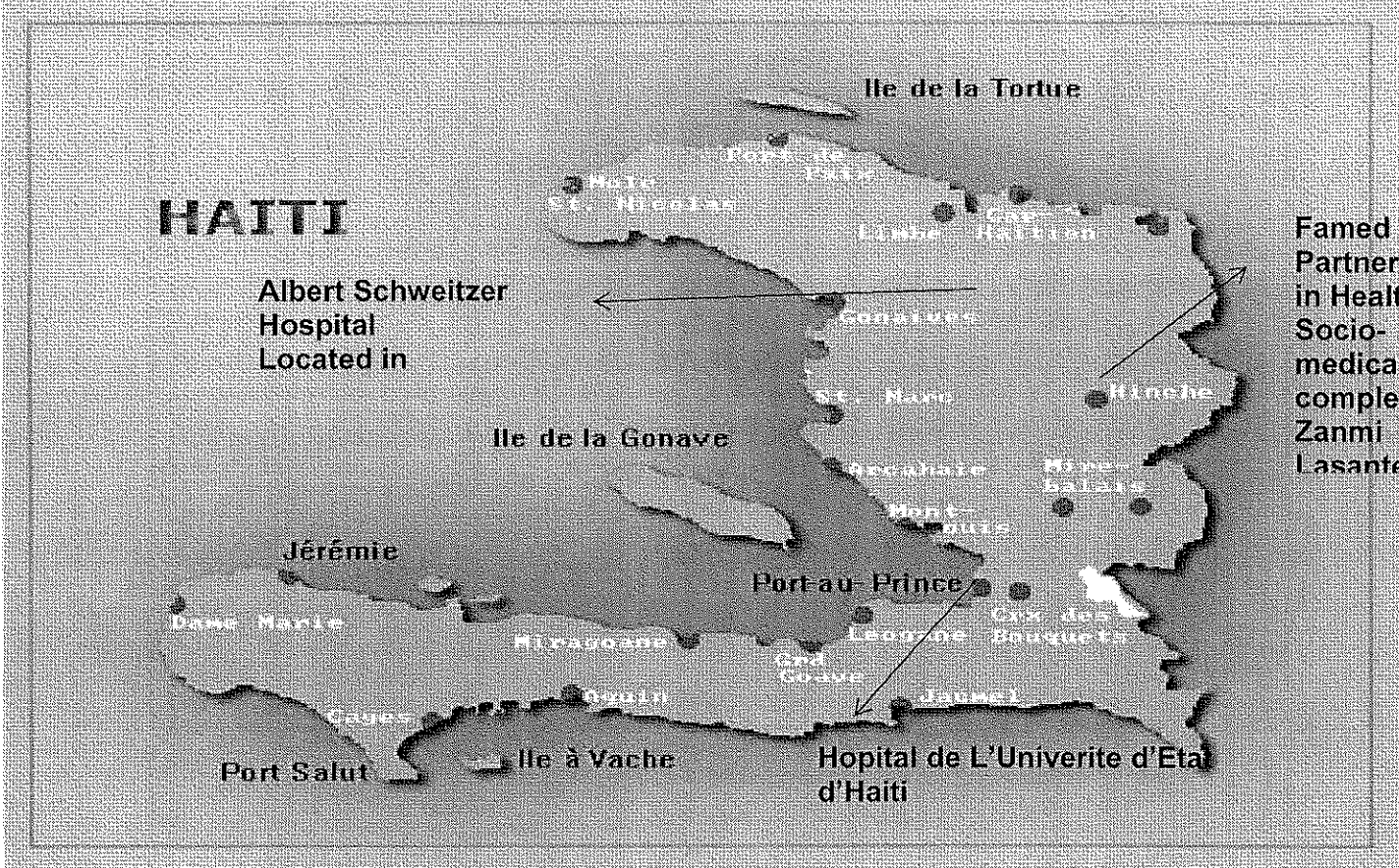


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3. Haitian Herbs Chart

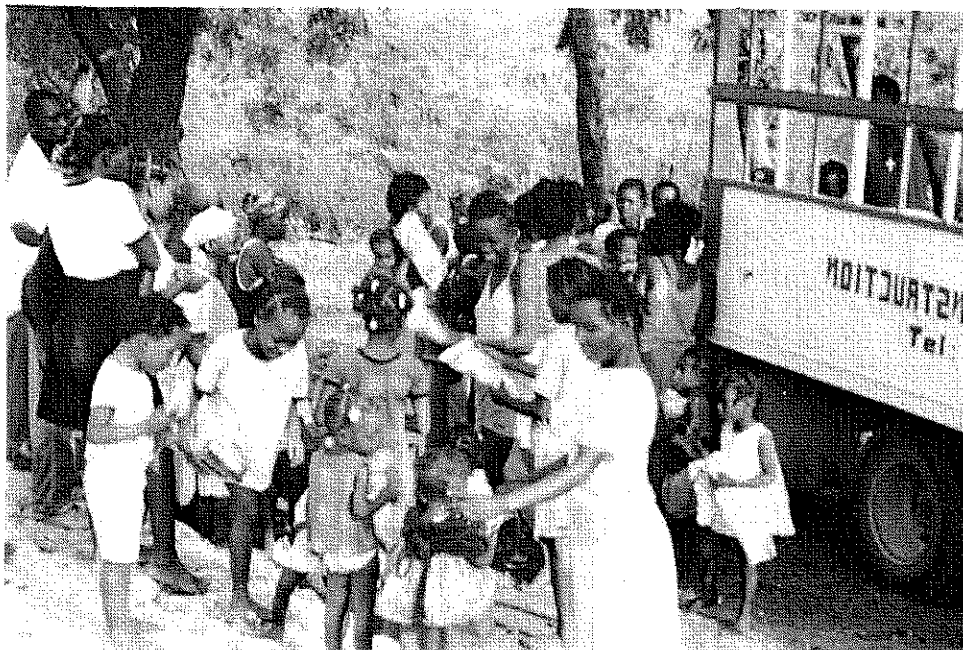
Herb	Treatment
Sasparilla	<ul style="list-style-type: none"> • Used as blood purifier, or promotes cleaning of the action of the liver, kidney, spleen, and bowels • Decoction (tea) of the sasparilla root
Catnip or catmint	<ul style="list-style-type: none"> • Mild herb that is safe for infants • Calming properties of catnip, rather than purgative
peppermint, spearmint, lemonmint and horsemint	<ul style="list-style-type: none"> • All of the mints have the effect of soothing indigestion and quieting nausea • First thing administered when stomach aches
Senna	<ul style="list-style-type: none"> • An infusion (tea) of senna is given to expel worms, reduce biliousness (belching and indigestion), and as an all-purpose laxative • in Haiti, where worms are a more prevalent problem among the population, senna is gathered and used for its febrifuge properties
Red Sage	<ul style="list-style-type: none"> • “Female herb” • an herb found in both locales and is known to be an emmenagogue, or that which promotes menstrual flow • the desired result is the instigation of bleeding •
Vervain	<ul style="list-style-type: none"> • increase menstrual flow much better than quinine for the purposes for which quinine is used • can be used to cause abortion • less violent than quinine (used in the US)
Douching	<ul style="list-style-type: none"> • used for general hygiene and curing excessive discharges. • Decoction made from oak bark

4. Map of Major Hospital Locations



Pluralism Presentation Slide Set, 11-2007.

5. Route 87 mission pictures



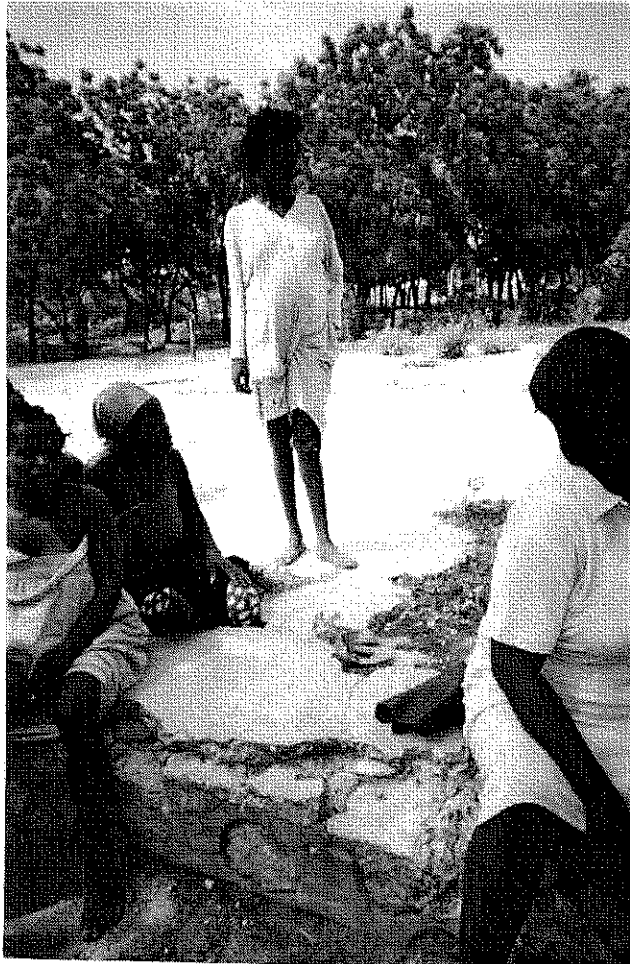
The children smile and laugh as they receive their toys.



The locals gather around the mission's truck upon arrival.



A visiting preacher comes to speak to the crowd.



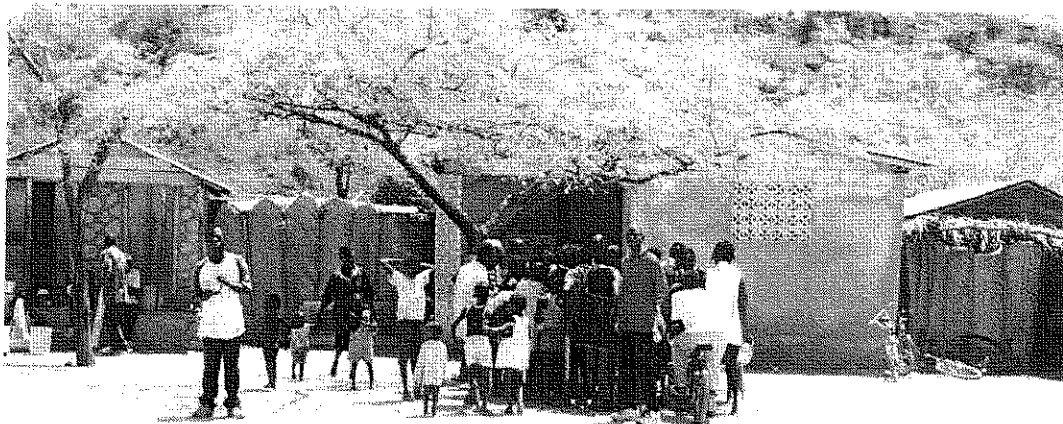
Young woman pregnant with her third child

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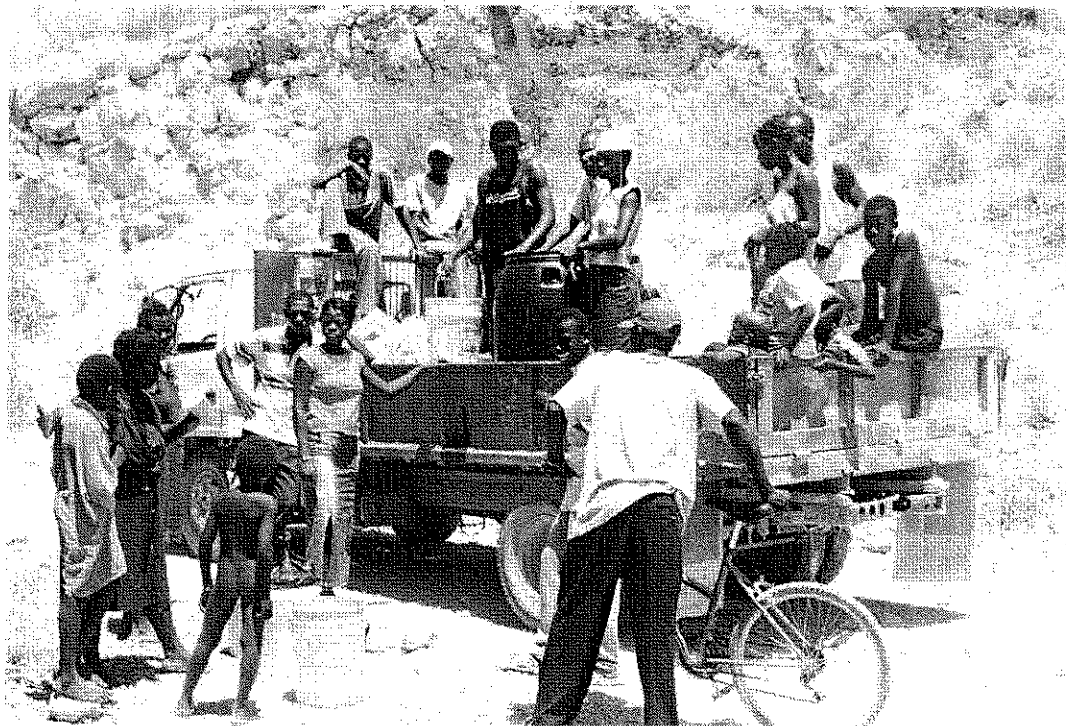


A crowd of locals stand in front of one of the 3 shacks.





The church is in between the two other shacks.



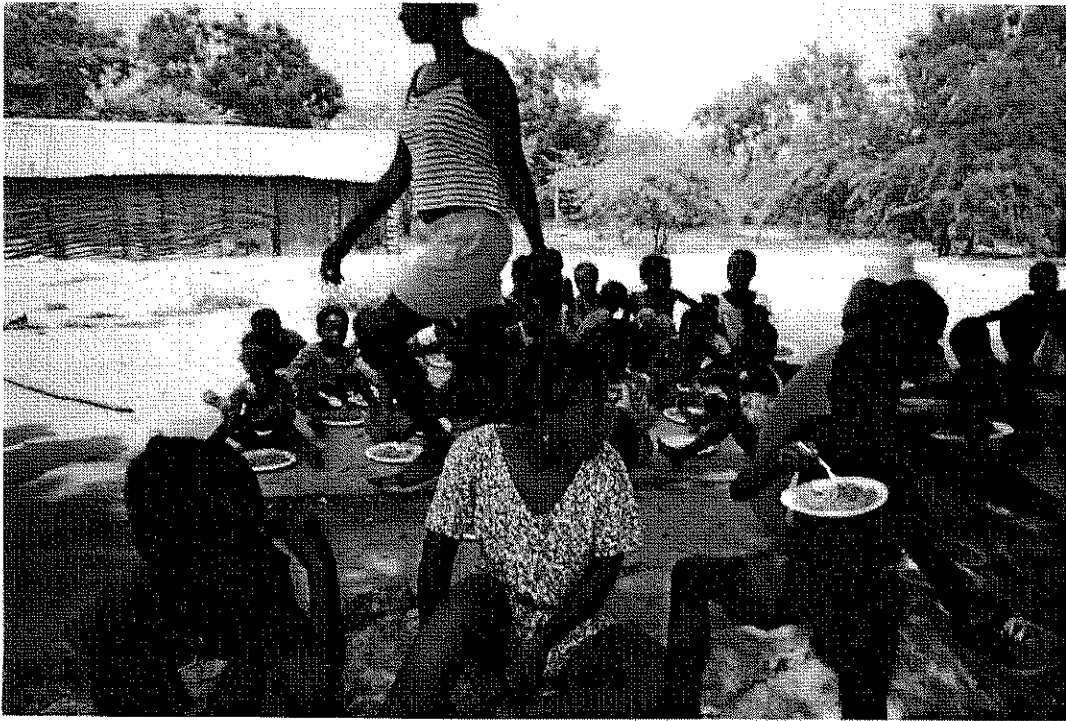
A small boy stands bare, awaiting provisions from the mission's truck.



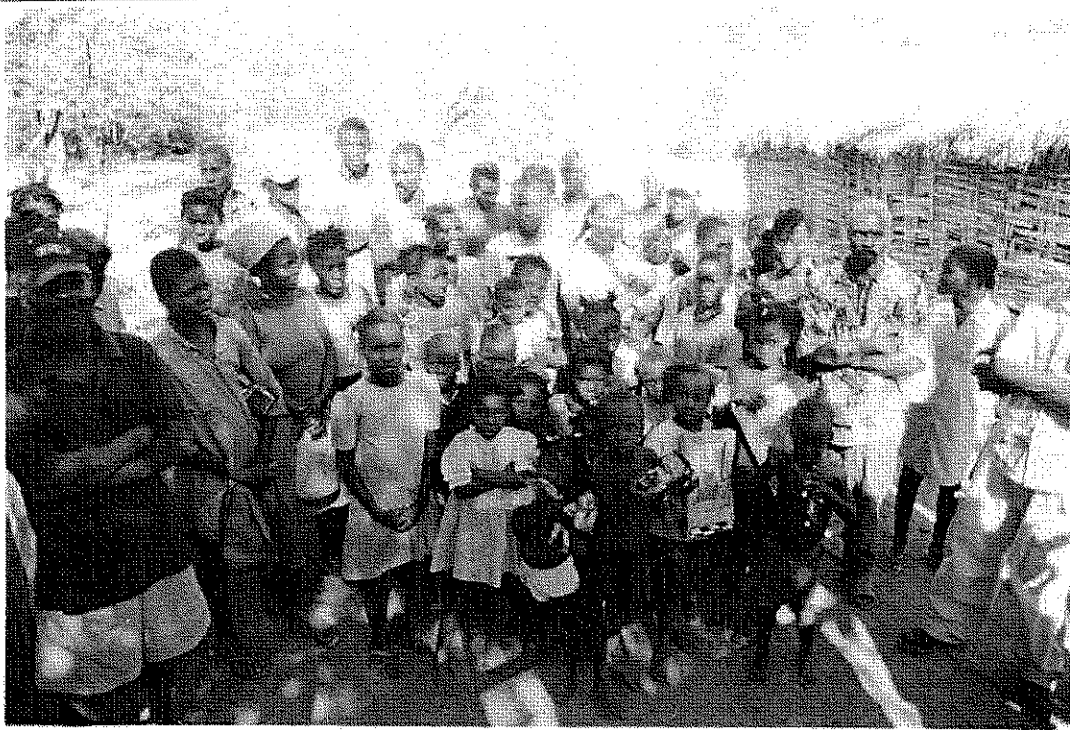
The women of Mont Rouis prepare the meal for the town of Route 87 (mixed vegetables and rice w/ beans)



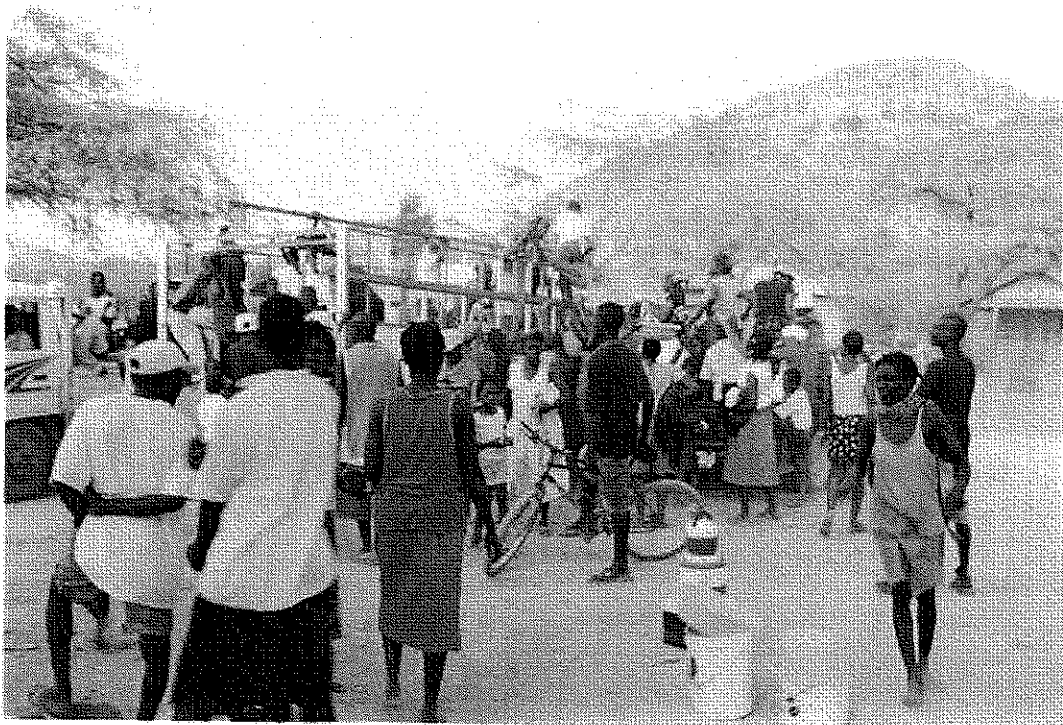
The locals patiently await a meal.



The children are served first.



The children show off their new toys in a group picture.



The mission begins its departure.

6. Facts about Haiti

Introduction	Haiti
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Background: The native Arawak Amerindians - who inhabited the island of Hispaniola when it was discovered by Columbus in 1492 - were virtually annihilated by Spanish settlers within 25 years. In the early 17th century, the French established a presence on Hispaniola, and in 1697, Spain ceded to the French the western third of the island - Haiti. The French colony, based on forestry and sugar-related industries, became one of the wealthiest in the Caribbean, but only through the heavy importation of African slaves and considerable environmental degradation. In the late 18th century, Haiti's nearly half million slaves revolted under Toussaint L'OUVERTURE and after a prolonged struggle, became the first black republic to declare its independence in 1804. Haiti has been plagued by political violence for most of its history. It is the poorest country in the Western Hemisphere.

Geography	Haiti
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Location: Caribbean, western one-third of the island of Hispaniola, between the Caribbean Sea and the North Atlantic Ocean, west of the Dominican Republic

Geographic coordinates: 19 00 N, 72 25 W

Map references: Central America and the Caribbean

Area: *total:* 27,750 sq km
land: 27,560 sq km
water: 190 sq km

Area - comparative: slightly smaller than Maryland

Land boundaries: *total:* 360 km
border countries: Dominican Republic 360 km

Coastline: 1,771 km

Maritime claims: *territorial sea:* 12 nm
contiguous zone: 24 nm
exclusive economic zone: 200 nm
continental shelf: to depth of exploitation

Climate: tropical; semiarid where mountains in east cut off trade winds

Terrain: mostly rough and mountainous

Elevation extremes: *lowest point:* Caribbean Sea 0 m
highest point: Chaîne de la Selle 2,680 m

Natural resources: bauxite, copper, calcium carbonate, gold, marble, hydropower

Land use: *arable land:* 28.3%
permanent crops: 11.61%
other: 60.09% (2001)

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- Irrigated land: 750 sq km (1998 est.)
- Natural hazards: lies in the middle of the hurricane belt and subject to severe storms from June to October; occasional flooding and earthquakes; periodic droughts
- Environment - current issues: extensive deforestation (much of the remaining forested land is being cleared for agriculture and used as fuel); soil erosion; inadequate supplies of potable water
- Environment - international agreements: *party to:* Biodiversity, Climate Change, Desertification, Law of the Sea, Marine Dumping, Marine Life Conservation, Ozone Layer Protection
signed, but not ratified: Hazardous Wastes
- Geography - note: shares island of Hispaniola with Dominican Republic (western one-third is Haiti, eastern two-thirds is the Dominican Republic)

People

Haiti

- Population: 8,121,622
note: estimates for this country explicitly take into account the effects of excess mortality due to AIDS; this can result in lower life expectancy, higher infant mortality and death rates, lower population and growth rates, and changes in the distribution of population by age and sex than would otherwise be expected (July 2005 est.)
- Age structure: *0-14 years:* 42.6% (male 1,741,622/female 1,721,436)
15-64 years: 53.9% (male 2,137,225/female 2,242,639)
65 years and over: 3.4% (male 124,383/female 154,317) (2005 est.)
- Median age: *total:* 18.03 years
male: 17.63 years
female: 18.44 years (2005 est.)
- Population growth rate: 2.26% (2005 est.)
- Birth rate: 36.59 births/1,000 population (2005 est.)
- Death rate: 12.34 deaths/1,000 population (2005 est.)
- Net migration rate: -1.68 migrant(s)/1,000 population (2005 est.)
- Sex ratio: *at birth:* 1.03 male(s)/female
under 15 years: 1.01 male(s)/female
15-64 years: 0.95 male(s)/female
65 years and over: 0.81 male(s)/female
total population: 0.97 male(s)/female (2005 est.)
- Infant mortality rate: *total:* 73.45 deaths/1,000 live births
male: 79.92 deaths/1,000 live births
female: 66.79 deaths/1,000 live births (2005 est.)
- Life expectancy at birth: *total population:* 52.92 years
male: 51.58 years
female: 54.31 years (2005 est.)
- Total fertility rate: 5.02 children born/woman (2005 est.)
- HIV/AIDS - adult prevalence rate: 5.6% (2003 est.)

HIV/AIDS - 280,000 (2003 est.)
 people living with
 HIV/AIDS:

HIV/AIDS - 24,000 (2003 est.)
 deaths:

Nationality: *noun*: Haitian(s)
adjective: Haitian

Ethnic groups: black 95%, mulatto and white 5%

Religions: Roman Catholic 80%, Protestant 16% (Baptist 10%, Pentecostal 4%,
 Adventist 1%, other 1%), none 1%, other 3% (1982)
note: roughly half of the population practices Voodoo

Languages: French (official), Creole (official)

Literacy: *definition*: age 15 and over can read and write
total population: 52.9%
male: 54.8%
female: 51.2% (2003 est.)

Government	Haiti
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Country name: *conventional long form*: Republic of Haiti
conventional short form: Haiti
local long form: Republique d'Haiti
local short form: Haiti

Government type: elected government

Capital: Port-au-Prince

Administrative divisions: 9 departments (departements, singular - departement); Artibonite, Centre,
 Grand 'Anse, Nord, Nord-Est, Nord-Ouest, Ouest, Sud, Sud-Est

Independence: 1 January 1804 (from France)

National holiday: Independence Day, 1 January (1804)

Constitution: approved March 1987; suspended June 1988 with most articles reinstated
 March 1989; in October 1991 government claimed to be observing the
 constitution; returned to constitutional rule in October 1994

Legal system: based on Roman civil law system; accepts compulsory ICJ jurisdiction

Suffrage: 18 years of age; universal

Executive branch: *chief of state*: Interim President Boniface ALEXANDRE (since 29 February
 2004)
note: Jean-Bertrand ARISTIDE resigned as president on 29 February 2004;
 ALEXANDRE, as Chief of the Supreme Court, constitutionally succeeded
 Aristide
head of government: Interim Prime Minister Gerald LATORTUE (since 12
 March 2004), chosen by extraconstitutional Council of Eminent Persons
 representing cross-section of political and civic interests
cabinet: Cabinet chosen by the prime minister in consultation with the
 president
elections: president elected by popular vote for a five-year term; election last
 held 26 November 2000 (next to be held in November 2005); prime minister

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appointed by the president, ratified by the National Assembly
election results: Jean-Bertrand ARISTIDE elected president; percent of vote - Jean-Bertrand ARISTIDE 92%

- Legislative branch: bicameral National Assembly or Assemblée Nationale consists of the Senate (27 seats; members elected by popular vote to serve six-year terms; one-third elected every two years) and the Chamber of Deputies (83 seats; members are elected by popular vote to serve four-year terms); note - the National Assembly stopped functioning in January 2004 when the terms of all Deputies and two-thirds of sitting Senators expired; no replacements have been elected; the President is currently ruling by decree
elections: Senate - last held for two-thirds of seats 21 May 2000 with runoffs on 9 July boycotted by the opposition; seven seats still disputed; election for remaining one-third held on 26 November 2000 (next to be held in 2005); Chamber of Deputies - last held 21 May 2000 with runoffs on 30 July boycotted by the opposition; one vacant seat rerun 26 November 2000 (next to be held in November 2005)
election results: Senate - percent of vote by party - NA%; seats by party - FL 26, independent 1; Chamber of Deputies - percent of vote by party - NA%; seats by party - FL 73, MOCHRENA 3, PLB 2, OPL 1, vacant 1, other minor parties and independents 3
- Judicial branch: Supreme Court or Cour de Cassation
- Political parties and leaders: Alliance for the Liberation and Advancement of Haiti or ALAH [Reynold GEORGES]; Assembly of Progressive National Democrats or RDNP [Leslie MANIGAT]; Ayiti Kapab [Ernst VERDIEU]; Convention for Democratic Unity or KID [Evans PAUL]; National Congress of Democratic Movements or KONAKOM [Victor BENOIT]; Nationalist Progressive Revolutionary Party or PANPRA [Serge GILLES]; Democratic Movement for the Liberation of Haiti or MODELH [Francois LATORTUE]; Grand Center Right Front coalition (composed of MDN, MRN, and PDCH) [Hubert de RONCERAY, Jean BUTEAU, Osner FEVRY and Marie-Denise CLAUDE]; Haitian Christian Democratic Party or PDCH [Osner FEVRY and Marie-Denise CLAUDE]; Haitian Democratic Party or PADEMH [Clark PARENT]; Haitian Democratic and Reform Movement or MODEREH [Dany TOUSSAINT and Pierre Soncon PRINCE]; Heads Together [Dr. Gerard BLOT]; Lavaias Family or FL [leader NA]; Liberal Party of Haiti or PLH [Michael MADSEN]; Mobilization for National Development or MDN [Hubert DE RONCERAY]; Movement for National Reconstruction or MRN [Jean Henold BUTEAU]; Movement for the Installation of Democracy in Haiti or MIDH [Marc BAZIN]; National Front for the Reconstruction of Haiti or FRON [Guy PHILIPPE]; National Progressive Democratic Party or PNDPH [Turneb DELPE]; New Christian Movement for a New Haiti or MOCHRENA [Luc MESADIEU]; Open the Gate Party (Parti Louvri Bayre) or PLB [leader NA]; Popular Party for the Renewal of Haiti, or Generation 2000 [Claude ROMAIN and Daniel SUPPLICE]; Struggling People's Organization or OPL [Edgard LEBLANC]; MNP28 [Dejean BELZAIRE]; KOMBA [Evans LESCOUFLAIR]
- Political pressure groups and leaders: Autonomous Organizations of Haitian Workers or CATH [Fignole ST-CYR]; Confederation of Haitian Workers or CTH; Federation of Workers Trade Unions or FOS; Group of 184 Civil Society Organization, or G-184 [Andy APAID]; National Popular Assembly or APN; Papaye Peasants Movement or MPP [Chavannes JEAN-BAPTISTE]; Popular Organizations Gathering Power or PROP; Roman Catholic Church; Protestant Federation of Haiti
- International organization participation: ACCT, ACP, Caricom (suspended), FAO, G-77, IADB, IAEA, IBRD, ICAO, ICCt (signatory), ICRM, IDA, IFAD, IFC, IFRCs, ILO, IMF, IMO, Interpol, IOC, IOM, ITU, LAES, MIGA, OAS, OPANAL, OPCW (signatory), PCA, UN, UNCTAD, UNDP, UNESCO, UNIDO, UPU, WCL, WCO, WFTU, WHO, WIPO, WMO, WTO, WTO

The Culture of Haitian Medicine: Route 87

Diplomatic representation in the US: *chief of mission:* Charge d'Affaires Raymond JOSEPH (as of November 2004)
chancery: 2311 Massachusetts Avenue NW, Washington, DC 20008
telephone: [1] (202) 332-4090
FAX: [1] (202) 745-7215
consulate(s) general: Boston, Chicago, Miami, New York, and San Juan (Puerto Rico)

Diplomatic representation from the US: *chief of mission:* Ambassador James B. FOLEY
embassy: 5 Harry S Truman Boulevard, Port-au-Prince
mailing address: P. O. Box 1761, Port-au-Prince
telephone: [509] 222-0354, 222-0269, 222-0200, 222-0327
FAX: [509] 223-1641 or 222-0200 ext 460

Flag description: two equal horizontal bands of blue (top) and red with a centered white rectangle bearing the coat of arms, which contains a palm tree flanked by flags and two cannons above a scroll bearing the motto L'UNION FAIT LA FORCE (Union Makes Strength)

Economy	Haiti
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Economy - overview:	In this poorest country in the Western Hemisphere, 80% of the population lives in abject poverty, and natural disasters frequently sweep the nation. Two-thirds of all Haitians depend on the agriculture sector, which consists mainly of small-scale subsistence farming. Following legislative elections in May 2000, fraught with irregularities, international donors - including the US and EU - suspended almost all aid to Haiti. The economy shrank an estimated 1.2% in 2001, 0.9% in 2002, grew 0.4% in 2003, and shrank by 3.5% in 2004. Suspended aid and loan disbursements totaled more than \$500 million at the start of 2003. Haiti also suffers from rampant inflation, a lack of investment, and a severe trade deficit. In early 2005 Haiti paid its arrears to the World Bank, paving the way to reengagement with the Bank. The resumption of aid flows from all donors is alleviating but not ending the nation's bitter economic problems. Civil strife in 2004 combined with extensive damage from flooding in southern Haiti in May 2004 and Tropical Storm Jeanne in northwestern Haiti in September 2004 further impoverished Haiti.
GDP (purchasing power parity):	\$12.05 billion (2004 est.)
GDP - real growth rate:	-3.5% (2004 est.)
GDP - per capita:	purchasing power parity - \$1,500 (2004 est.)
GDP - composition by sector:	<i>agriculture:</i> 30% <i>industry:</i> 20% <i>services:</i> 50% (2001 est.)
Labor force:	3.6 million <i>note:</i> shortage of skilled labor, unskilled labor abundant (1995)
Labor force - by occupation:	agriculture 66%, industry 9%, services 25%
Unemployment rate:	widespread unemployment and underemployment; more than two-thirds of the labor force do not have formal jobs (2002 est.)
Population below poverty line:	80% (2003 est.)

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Household income or consumption by percentage share:	<i>lowest 10%: NA</i> <i>highest 10%: NA</i>
Inflation rate (consumer prices):	22% (2004 est.)
Budget:	<i>revenues: \$330.2 million</i> <i>expenditures: \$529.6 million, including capital expenditures of NA (2004 est.)</i>
Agriculture - products:	coffee, mangoes, sugarcane, rice, corn, sorghum, wood
Industries:	sugar refining, flour milling, textiles, cement, light assembly industries based on imported parts
Industrial production growth rate:	NA
Electricity - production:	618 million kWh (2002)
Electricity - production by source:	<i>fossil fuel: 60.3%</i> <i>hydro: 39.7%</i> <i>nuclear: 0%</i> <i>other: 0% (2001)</i>
Electricity - consumption:	574.7 million kWh (2002)
Electricity - exports:	0 kWh (2002)
Electricity - imports:	0 kWh (2002)
Oil - production:	0 bbl/day (2001 est.)
Oil - consumption:	11,000 bbl/day (2001 est.)
Oil - exports:	NA
Oil - imports:	NA
Current account balance:	-\$27.63 million (2004 est.)
Exports:	\$338.1 million f.o.b. (2004 est.)
Exports - commodities:	manufactures, coffee, oils, cocoa, mangoes
Exports - partners:	US 81.2%, Dominican Republic 7.3%, Canada 4.1% (2004)
Imports:	\$1.085 billion f.o.b. (2004 est.)
Imports - commodities:	food, manufactured goods, machinery and transport equipment, fuels, raw materials

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Imports - partners:	US 34.8%, Netherlands Antilles 18%, Malaysia 5.1%, Colombia 4.7% (2004)
Reserves of foreign exchange and gold:	\$80.64 million (2004 est.)
Debt - external:	\$1.2 billion (2004 est.)
Economic aid - recipient:	\$150 million (FY04 est.)
Currency (code):	gourde (HTG)
Currency code:	HTG
Exchange rates:	gourdes per US dollar - 38.352 (2004), 42.367 (2003), 29.251 (2002), 24.429 (2001), 21.171 (2000)
Fiscal year:	1 October - 30 September

Communications Haiti

Telephones - main lines in use:	130,000 (2002)
Telephones - mobile cellular:	140,000 (2002)
Telephone system:	<i>general assessment:</i> domestic facilities barely adequate; international facilities slightly better <i>domestic:</i> coaxial cable and microwave radio relay trunk service <i>international:</i> country code - 509; satellite earth station - 1 Intelsat (Atlantic Ocean)
Radio broadcast stations:	AM 41, FM 26, shortwave 0 (1999)
Radios:	415,000 (1997)
Television broadcast stations:	2 (plus a cable TV service) (1997)
Televisions:	38,000 (1997)
Internet country code:	.ht
Internet hosts:	NA
Internet Service Providers (ISPs):	3 (2000)
Internet users:	80,000 (2002)

Transportation Haiti

Highways:	<i>total:</i> 4,160 km <i>paved:</i> 1,011 km <i>unpaved:</i> 3,149 km (1999 est.)
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Ports and harbors: Cap-Haitien

Airports: 13 (2004 est.)

Airports - with paved runways: *total: 4*
2,438 to 3,047 m: 1
914 to 1,523 m: 3 (2004 est.)

Airports - with unpaved runways: *total: 9*
914 to 1,523 m: 4
under 914 m: 5 (2004 est.)

Military	Haiti
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Military branches:	the regular Haitian Armed Forces (FAdH) - Army, Navy, and Air Force - have been demobilized but still exist on paper until or unless they are constitutionally abolished
Military service age and obligation:	18 years of age for voluntary recruitment into the police force (2001)
Manpower available for military service:	<i>males age 18-49: 1,626,491 (2005 est.)</i>
Manpower fit for military service:	<i>males age 18-49: 948,320 (2005 est.)</i>
Manpower reaching military service age annually:	<i>males: 98,554 (2005 est.)</i>
Military expenditures - dollar figure:	\$26 million (2003)
Military expenditures - percent of GDP:	0.9% (2003)

Transnational Issues	Haiti
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Disputes - international:	since 2004, about 8,000 peacekeepers from the UN Stabilization Mission in Haiti (MINUSTAH) maintain civil order in Haiti; despite efforts to control illegal migration, Haitians fleeing economic privation and civil unrest continue to cross into Dominican Republic and to sail to neighboring countries; Haiti claims US-administered Navassa Island
Illicit drugs:	major Caribbean transshipment point for cocaine en route to the US and Europe; substantial money-laundering activity; Colombian narcotics traffickers favor Haiti for illicit financial transactions; pervasive corruption

<http://geography.about.com/library/cia/blchaiti.htm>