Marketing Plan

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Marketing Concepts
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1.0 SITUATIONAL ANALYSIS

1.1 External Analysis

1.1.1 Lighting in Haiti
Only about 25% of the country of Haiti is electrified. For those who are not on the electric grid, lighting is primarily done by kerosene lamps and homemade candles. Kerosene fuel can cost as much as 50 cents a night, a substantial amount of money considering most Haitians only make about 2 dollars a day. Besides cost, kerosene also has many negative health risks, specifically harmful fumes and the risk of broken glass and fire. Due to these factors, many Haitians do not have much if any space lighting in their homes at night. As a result, most residents go to bed early and cannot read, work or cook after 7pm (Brownell).

1.1.2 Demographics
Haiti is the most densely populated nation in the western hemisphere. About half of the population of Haiti relies on government subsidized farming. Some of these farmers own land, but most do not have enough to grow food for their families, let alone earn a sufficient income. Overcrowding and the demand for wood charcoal have led to severe deforestation and soil erosion throughout the country. Haiti has the lowest per capita income of any country in the western hemisphere. Plagued by disease, malnutrition, illiteracy, political upheaval, and deforestation, more than three quarters of the population live in extreme poverty (“World Vision”). A complete demographic breakdown is shown in the Appendix.

1.1.3 Cultural Considerations
Haitians rely primarily on primitive means of transportation, cooking and space lighting. Most citizens have no experience at all with modern technologies such as cell phones or personal computers. Family units are valued over individuals. Households typically consist of five to eight people and often times consist of three generations under one roof. Families often share time, money and resources freely and often congregate at night in a common room. Since Haiti is a very poor country, theft has become a significant problem (Brownell). Many U.S. churches have missionaries in Haiti that have helped to organize religious activities as well as provide social opportunities and civil service projects. Overall Haitians have been very open to change and developing modern technology when given the resources (Munos).

1.1.4 Political Environment
While Haiti is one of the oldest republics in the western hemisphere, oppression from poor national leadership has plagued the country in recent years. The United States and France have intervened numerous times to bring stability to the country. Citizens are aware of this intervention, impacting the way Haitians view the federal government is viewed. The government is very lax in regards to health and safety standards and
generates little tax money to pay for public works projects. Thus, many public projects must be funded externally, largely through the United Nations or Non-Government Organizations (NGOs).

1.1.5 Non-Government Organizations in Haiti

The following is a list of non-profits that could potentially partner with Green Power

**H.O.P.E. Outreach**

HOPE Outreach is a Rochester non-profit that helps the people of Borgne, Haiti build infrastructure and increase standards of living. Green Power has already been in close contact with HOPE.

[www.hopehaiti.org](http://www.hopehaiti.org)

**S.O.I.L. (Sustainable Organic Integrated Livelihoods)**

SOIL is a non-profit that concentrates its efforts on providing sewage systems, soil conservation and transforming waste into resources in Haiti. Sarah Brownell, co-founder of SOIL, is a 1998 graduate of RIT. Green Power has also been in contact with SOIL.

[www.oursoil.org](http://www.oursoil.org)

**World Vision**

World Vision is a Christian organization that uses its fundraising to support children in countries including Haiti, give towards humanitarian projects and give micro-loans for Haitians to start or expand their own business.

[www.worldvision.org](http://www.worldvision.org)

**Christian Aid**

Christian Aid is a UK based Christian organization that focuses on indigenous missionaries, child support, disaster relief and humanitarian projects. They have operations in countries around the world, including Haiti.

[www.christianaid.org](http://www.christianaid.org)

1.2 Internal Analysis

1.2.1 Company Background

Green Power is a newly founded start-up company based in Rochester, NY. The company was founded this year as a follow-up to a multi-disciplinary senior design project at the Rochester Institute of Technology. The management team consists primarily of engineering students on the engineering team who designed the Green Bike power station and the Green Light LED lamp. The Green Bike and Green Light are shown in Figure 1 and Figure 2, respectively.
The Green Bike is a power generation station and will be marketed towards local entrepreneurs who would establish a “pay-per-charge” business. The Green Light is an LED lamp that provides space lighting in small areas. The Green Light is made to be charged with the Green Bike. Thus, the entrepreneur who has the Green Bike would have an incentive to sell as many Green Lights as possible to make the business a success. More product information is presented in Section 5.1.

Green Power currently operates in Rochester, New York. Operations will be moved to Haiti within the next year or two to give the management team direct control of manufacture and distribution of its products as well as to shorten the supply chain. A supporting team of local supervisors, laborers and distributors will be hired once an assembly plant is built in Borgne, Haiti.

The original RIT senior design project was funded by the Environmental Protection Agency as part of a People, Prosperity and Planet grant. This grant gave Green Power $10,000 in initial funding for producing a prototype. Currently there are no additional funds needed for operation of Green Power since the company has essentially no operating expense. Additional capital will be needed soon in order to begin production in Haiti. This will be funded by a combination of NGOs and private investment capital and government grants. Once Green Power products begin distribution, sales revenue
will be the primary source of operating funds. The current management team will oversee all aspects of the business.

1.2.2 Marketing Intermediaries
As stated earlier, the main sources of space lighting for homes in Haiti currently are candles and kerosene lamps. Since both of these fuels burn relatively fast, a distribution system is currently in place for Haitians to buy candles and kerosene fuel. These products are typically sold at open air markets in the town centers. Kerosene is subsidized by the federal government, yet priced have remained relatively high (Brownell). The distribution system for kerosene and candles currently in place will serve as an excellent starting place for a distribution system for the Green Power. Green Power products can be sold alongside candles, kerosene fuel and lamps in markets. This makes the current distribution system a very important piece in the success of Green Power. A failure to get the local vendors interested in Green Bike and Green Light would lead to a severe blow to business development.

In addition to local distributors and merchants, several of the NGOs previously listed will play an important role in distribution. NGOs serve as middle men for numerous products in Haiti, specifically health care products and civil service projects such as water and sewer. NGOs would most likely have the resources to both purchase and distribute both the Green Power products on the ground to families in need. These NGOs would also help to promote the product both to families in Haiti as well as to financial supporters in the US and other countries.

Governmental organizations would also likely be middle men for Green Power products. Organizations such as the EPA, Peace Corp and the United Nations commonly subsidize or purchase necessary products for people in developing nations. Marketing efforts should be made in regards to these organizations since they could potential provide a large portion of the financial support as well as positive press for the product and company.

1.2.3 Customer Markets
Only the residential end-use markets are being targeting for Green Power products. The low light output of the Green Light lamps make them impractical for use in industrial or most commercial applications. Due to their relatively high price, resellers and government markets will likely not be interested in Green Power products. Some small commercial enterprises may purchase the Green Lights to provide better lighting for their business. Many Haitians sell goods at open-air night markets with kerosene lamps. Green Light LED lanterns could replace these to provide customers with better quality light and potential increase their hours of operation. However, since most night merchants are also in need of a domestic light, the domestic market is viewed as the primary target market.
2.0 SITUATIONAL ANALYSIS

2.1 Competitive Analysis

2.1.1 Kerosene and Candle Market

In most developing countries, including Haiti, fuel based lighting is the predominate form of space lighting. In Haiti, the two primary lighting options are kerosene hurricane lamps and candles. These are purchased at local markets with a distribution system that has been firmly established over the years.

Kerosene lamps cost about 3 or 4 dollars in Haiti. Fuel costs about 6 dollars a gallon or about 25 cents each night the lamp is used. Most of these lamps are glass hurricane lamps similar to ones used in the United States in the 1800’s. One of the major problems with these lamps is that the glass is very prone to breaking. It cost over a dollar to replace the glass. A more compact kerosene lamp has been developed that uses a metal bottom with a wick coming out of the top. These cheaper lamps are also used in Haiti. However, this type of lamp covers everything in the room with soot and causes additional respiratory problems (Brownell).

Candles cost about 13 cents apiece in Haiti. Since they provide so little light, candles are not typically used for everyday activities. They are more often used as a back-up light source or for families who cannot afford kerosene. There is also a higher risk of house fire when burning candles (Brownell).

Since both of these lighting systems are very simple, no major improvements have been made in the kerosene or candle market. Since there is no competition to fuel based lighting besides electricity in the larger cities, there is no marketing or promotional material. In fact, since Haitians have such little disposable income, families are often faced with the decision of buying food or fuel at the local market. Food is always chosen above fuel. Due to the lack of competition or other options, Haitians have little choice when it comes to fuel based lighting systems. Haitians who do buy fuel based lighting can spend 17% or more of their annual income on lighting. (Americans spend far less than 1% of their annual income on lighting). For this reason, many people choose not to use fuel based lighting and therefore go to bed when the sun goes down (Brownell).

2.1.2 Non-Profit and Charitable Organizations

When considering the “competition” for Green Power, non-profit and charitable organization must be considered. Due to a finite amount of money spent on grants and donations for developing nations such as Haiti, these organizations compete with Green Power for the same pool of money in both government and private sectors. While there is no other company or organization developing lighting solutions in Haiti, there are several organizations in other countries that distribute similar LED lamps.
The World Bank’s International Finance Corporation spent more than 5 million dollars on their *Lighting Africa* program. This program gives money to private companies to develop renewable lighting options for people in Sub-Saharan Africa (World Bank Group 14). One of the most successful products to come out of this program is the BOGO solar powered flashlight. These flashlights are sold to people in the United States with the idea that half the money goes towards their flashlight and the other half goes towards giving someone in Africa a unit, “By One, Give One”.

d.light Design is a for-profit company in India started by two Stanford MBA students. The company sells LED lamps in India and also has a non-profit arm *Give Light Program* that has risen over $11,000. The company has been given close to a $500,000 in funding from both U.S. and Indian organizations. Their lamps are charge by a wall outlet or solar panels.

Other renewable light sources have been developed recently that will also indirectly compete with Green power. The solar-powered “Tukimara” LED light is currently undergoing field testing in India while Stanford is developing LED lantern prototypes for use in the developing world with a concentration also on India.

There exist numerous grants and donation money that is competed for everyday between different charitable organizations. Millions of dollars of charitable donations flow into Haiti each year. This money goes to humanitarian aid, non-profit and religious organizations.

While non-profits and charitable organizations could take support money away from Green Power, these organizations also have the potential to help the company financially and through promotional activities. Many churches raise money for the country of Haiti for no specific cause. An alliance with a mission organization such as World Vision could provide a subsidy for lantern units or could provide large one time donations for large quantities of lanterns. Opportunities such as this should be looked into to make the lanterns more affordable for the local population.
2.2 SWOT Analysis

Table 1 below outlines the Strengths, Weaknesses, Opportunities and Threats for Green Power.

<table>
<thead>
<tr>
<th>Internal Factors</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>External Factors</th>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
<td>managers know product in-depth, local contacts</td>
<td>little business skills</td>
<td>Economic</td>
<td>low-cost product, low-cost employees</td>
<td>customers make very little money, low profit margins</td>
</tr>
<tr>
<td>Marketing</td>
<td>product has marketing plan</td>
<td>no brand awareness to date</td>
<td>Competition</td>
<td>No competition in Haiti, monopoly</td>
<td>foreign companies, NGOs vying for $$</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>relatively simple construction</td>
<td>even simple parts could be hard to machine in Haiti</td>
<td>Demographic</td>
<td>customers are willing to adapt new technology</td>
<td>very poor customers</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>management has engineering background</td>
<td>customer feedback is hard to get while in the US</td>
<td>Technology</td>
<td>much better than current technology</td>
<td>electrification would make LED lamps obsolete</td>
</tr>
<tr>
<td>Product Offerings</td>
<td>Better than anything else in the market</td>
<td>limited only to lighting currently</td>
<td>Regulatory</td>
<td>Haiti has very little regulation to comply with</td>
<td>if sold in US or Europe, significant regulations would need to be met</td>
</tr>
</tbody>
</table>

Long-term cost effectiveness is the main strength for Green Power products. The relatively high product cost would easily be recouped by the money saved on kerosene fuel. Also, the product is “green” with no harmful emissions given customers a healthier life. Since the management team also designed the Green Bike and Green Light, they are very familiar with the product and its capabilities. Product iteration also becomes easier in this regard.

The biggest threat to Green Power is that the customers have such little income. This makes it very hard to sell a higher technology product. This also dramatically shrinks the profit margins. Thus, high sales volumes will be needed to make the company successful. Non-profits or outside competitors could also take away market share from Green Power.
3.0 TARGET MARKET AND VALUE PROPOSITION

3.1 Target Market

The target market for Green Power will be villagers in Haiti that have no access to electric power. Since less than 25% of Haitians have access to electric power and most live in smaller cities, this constitutes about 6,750,000 people (CIA Factbook).

To create market penetration, an initial market will be targeted in Borgne, a small village on the Haiti’s northern coast. This community is representative of most villages in Haiti. A Rochester non-profit, H.O.P.E. Haiti, also does work in the village. This will make the initial distribution and marketing more effective and can serve as a guide for the rest of the country.

Most residents in Borgne are farmers making very little money. They typically live in houses as small as 10 by 15 feet. As many as 6 to 8 people can live in these small houses, often made of cinder block and sheet metal. At night, a family typically gathers in a common area to eat and socializes. If the family does not have a lantern or other light source, the family may go to bed around 8:00pm (Brownell).

Table 2 below summarizes the specific target market in terms of both demographics and psychographics.

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Psychographics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under age 14</td>
<td>&quot;bed time&quot;</td>
</tr>
<tr>
<td>Rural</td>
<td>lighting sources used</td>
</tr>
<tr>
<td>Literacy Rate</td>
<td>technology knowledge</td>
</tr>
<tr>
<td>Daily Income</td>
<td>common night-time activities</td>
</tr>
<tr>
<td>population/mi^2</td>
<td>media</td>
</tr>
<tr>
<td></td>
<td>cooking, reading, crafts</td>
</tr>
<tr>
<td></td>
<td>signs in local market</td>
</tr>
</tbody>
</table>

3.2 Value Proposition

With the lack of electric lighting so prevalent in Haiti, many people have a difficult time doing even simple tasks. School age children must read as much as possible during the day. At night, the only light that is available is the occasional kerosene lantern that gives off a faint orange glow. Due to the low quality of light, most children do not even bother reading at night. Those who do read by kerosene light must breathe in harmful emissions as they study. The lack of adequate lighting to read at night is a major reason for low education levels in the country. With little education, most residents are forced to become farmers, as 75% of the country has done. With little money from farming, Haitians cannot afford to move to better living conditions and have no means to advance themselves in life. Thus, the circle of poverty is very much a reality for millions of Haitians.
With access to a high quality, free and clean source of light from the Green Light, Haitians could do activities at night easier than ever before, and in some cases never possible at all. Children could read, laborers could work and mothers could cook. Families would not be forced to go to sleep when the sun goes down. Since working days would be lengthened, educational levels would likely rise, and with it economic productivity and standards of living. Figure 3 shows the light output for LED lamps compared to candles and kerosene lamps.

Not only would families have access to more and better light than from a kerosene lamp, they would also be saving money on kerosene fuel. Since some people spend upwards of 15% of their income on kerosene, a great deal of money could be saved and used to purchase other items to further increase the standard of living.

4.0 MARKETING GOALS AND OBJECTIVES

Table 3 below outlines Green Powers marketing goals

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of vendors using Green Bike</td>
<td>20</td>
<td>100</td>
<td>500</td>
</tr>
<tr>
<td>Number of households with Green Light</td>
<td>200</td>
<td>1250</td>
<td>7,000</td>
</tr>
<tr>
<td>Number of churches/community centers with Green Bike</td>
<td>10</td>
<td>50</td>
<td>100</td>
</tr>
</tbody>
</table>
5.0 MARKETING STRATEGY

5.1 Product Strategy
Green Power’s strategic plan is to become a world leader in human powered products that increase standards of living for impoverished citizens of the world. While Green Power currently is only working on two products, the Green Bike and Green Light, the company will continually develop its brand and diversify its product line. Future product offerings could include:

- water purification systems
- “treadle” pumps for water irrigation
- crank radios
- photovoltaic power systems

All of these products are in-line with the mission statement of Green Power:

“To provide clean and affordable power to citizens of underdeveloped nations.”

-Mission Statement

The first product that will be offered is the Green Bike power station, previously shown in Figure 1. The Green Bike power unit will be purchased by local merchants with the intent of starting a micro-business in his or her village. The bike will provide power to charge electronic devices via a DC plug, the first of which will be the Green Light LED lantern. The entrepreneur will charge villagers a fee to have their devices charged. Since many local entrepreneurs will not be able to purchase the bike themselves, a lending program will be established by Green Power that will enable entrepreneurs to better afford the large upfront cost of the bike.

Non-profit, religious and other NGOs will also be targeted as customers for Green Bike. Since many of these organizations are aiming to improve living standards for people in underdeveloped nations, Green Bike would be a great tool to provide power for those who have lagged far behind modern technological improvements. Most Green Bikes sold to NGOs would not be intended for use as a micro-business, but as a free source of power for the whole community. NGOs could also subsidize the price to allow more entrepreneurs to purchase the units.

Green Light LED lamps will also be sold by Green Power. These lamps were previously shown in Figure 2. The Green Light uses a high intensity LED to provide space lighting. The unit can be hung on the ceiling or from a stand and can also be carried as a flashlight. The Green Light design will be further developed to make mass-producing in Haiti possible.
and to improve upon the initial design. Green Light has the following advantages over current kerosene lamps:

- The light output is 100 lumens, over three times that of a kerosene lantern
- Since it is human powered, there are no on-going fuel costs to the user, saving most Haitians about $60 each year
- It is better for the environment and has no toxic emission users breathe in
- It is more robust and has no glass that cracks such as with the current kerosene lamps
- It creates a micro-business by assembling the units in-country and providing jobs for entrepreneurs to charge the units

5.2 Pricing Strategy
Since affordability is one of the top requirements for any product sold in developing nations, a simple cost-plus pricing strategy will be used. Parts, shipping, labor and distribution costs for the Green Light are $15.00 per unit. A 23% markup will be implemented to bring the sale price to $18.45. Kerosene lamps currently in use cost about $4 in Haiti (Brownell). However, with an ongoing need to purchase fuel to burn, annual costs add up to around $60. Thus, the Green Light will pay for itself in less than four months.

Green Power has no intention of implementing price skimming or penetration pricing for the Green Light. The $18.45 sale price is already at a level where it will take substantial sales volumes to break even. However, since the lantern will likely be sold to NGOs or foreign governments, bulk pricing will be offered for orders over 100 units. Bulk prices are as follows:

- 100-500 units: $17.95/unit
- 500-1000 units: $17.45/unit
- 1000-5000 units: $16.95/unit
- 5000+ units: $16.45/unit

The Green Bike costs $80 for parts, shipping, distribution and labor. Using the same 23% cost-plus mark-up, the sale price comes to $98.40. Kerosene costs about $0.13 per hour of use, so 4 hours of lantern fuel would cost $0.52. To ensure residents actually save money, $0.25 will be a good sale price for a Green Light lamp charge that lasts 4 hours. Haitians living near cities often pay $0.25 or more for cell phone charges which require much less energy, so $0.25 is a reasonable per-charge price.

Like the Green Bike, the Green Light would not have any price skimming or alternative pricing strategies. However, it is likely that several churches and other NGOs would purchase or subsidizes purchases for communities. Bulk order prices are as follows:
20-100: $95.00/unit
100-500: $90.00/unit
500+: $85.00/unit

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Green Light</th>
<th>Green Bike</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-100</td>
<td>$18.45</td>
<td></td>
</tr>
<tr>
<td>100-500</td>
<td>$17.95</td>
<td></td>
</tr>
<tr>
<td>500-1000</td>
<td>$17.45</td>
<td></td>
</tr>
<tr>
<td>1000-5000</td>
<td>$16.95</td>
<td></td>
</tr>
<tr>
<td>5000+</td>
<td>$16.45</td>
<td></td>
</tr>
<tr>
<td>1-20</td>
<td></td>
<td>$98.40</td>
</tr>
<tr>
<td>20-100</td>
<td></td>
<td>$95.00</td>
</tr>
<tr>
<td>100-500</td>
<td></td>
<td>$90.00</td>
</tr>
<tr>
<td>500+</td>
<td></td>
<td>$85.00</td>
</tr>
</tbody>
</table>

While the initial product costs seem high considering most Haitians only make $2 a day, the long-term cost savings versus kerosene makes the investment worth it. Green Power must make the customer in Haiti aware of the cost benefit of its products. Most Haitians look solely at up-front costs, so convincing them of long-term value is critical. Figure 4 below shows the long-term costs of a kerosene lamp versus the Green Lamp.

**Figure 4: Kerosene vs Green Light Economics**

It is important to note that due to low ownership costs of the Green Lamp, the unit pays for itself after just a few months.

### 6.0 MARKETING STRATEGY

#### 6.1 Channel Strategy

Green Power’s distribution and channeling strategy has already been discussed in Section 1.2.2. As previously stated, Green Power will use pre-existing kerosene distribution
systems to distribute Green Power products. This channeling will be complemented by the help of strategic partnerships with non-profit organizations, churches and schools.

6.2 Marketing Communications Strategy
Haiti is one of the poorest countries in the Western Hemisphere and lacks most “main stream” advertisement mediums such as TV, internet, etc. Green Power’s marketing strategy for communicating its products will be the use of Word of Mouth (WOM), press releases, print ads and radio. To reach a broader range of customers we will emphasize development of a brand awareness for our product and demonstrating its usage to the local communities through schools, churches and other local organizations. These demonstrations will be performed at different levels including:

- Local residents/customers
- Sustainable and developmental NGOs
- Local Government
- Local suppliers of kerosene / shops

Green Power will be looking especially at establishing positive relationships with NGOs and local government institutes which will be a target for bulk purchases. A group of indigenous sales people will be trained to use and repair the Green Bike and Green Light and will be given sales advice for selling Green Lights. This approach will fulfill our initial target of creating awareness and advertising.

The message that Green Power will communicate about its product has several dimensions including:

- Low price in comparison with other sources of lightning. It is a onetime purchase with low maintenance costs.
- Health benefits. It has no toxic emissions that could lead to respiratory ailments such as with kerosene.
- Environmental friendly / sustainable.
- More light output than kerosene and candles.

7.0 TIMELINE AND BUDGET
Figure 3 below shows the marketing timeline and expenses for Green Power.

Figure 5: Marketing Timeline

<table>
<thead>
<tr>
<th>Press Releases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Democrat and Chronicle, Buffalo News, USA Today, Popular Science, Newsweek</td>
</tr>
<tr>
<td>Cost: Free</td>
</tr>
</tbody>
</table>
Press releases, radio advertisements and live demonstrations are to take place during the first 18 months of the product launch. Customer feedback and product iteration will then take place in response to the feedback Green Power receives. Pamphlets and church fundraising
will be on-going. Pamphlets will be distributed in locations with Green Bikes. Presentations at churches has the potential to become a large source of revenue for Green Power. The ability to acquire private funds to subsidize or outright by Green Power products.

8.0 REFERENCES


9.0 APPENDIX: DEMOGRAPHICS

<table>
<thead>
<tr>
<th>Geography</th>
<th>Haiti</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area:</td>
<td>total: 27,750 sq km</td>
</tr>
<tr>
<td></td>
<td>land: 27,560 sq km</td>
</tr>
</tbody>
</table>
## People

### Haiti - Population:
- **8,924,553**
  - *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, higher death rates, lower population growth rates, and changes in the distribution of population by age and sex than would otherwise be expected (July 2008 est.)

### Age structure:
- **0-14 years:** 41.8% (male 1,881,509/female 1,851,591)
- **15-64 years:** 54.7% (male 2,386,761/female 2,495,233)
- **65 years and over:** 3.5% (male 135,695/female 173,764) (2008 est.)

### Median age:
- **total:** 18.5 years
- **male:** 18.1 years
- **female:** 19 years (2008 est.)

### Population growth rate:
- 2.493% (2008 est.)

### 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%
  - *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.)

## Economy

### Haiti - GDP (purchasing power parity):
- $12.15 billion (2008 est.)

### GDP (official exchange rate):
- $6.966 billion (2008 est.)
<table>
<thead>
<tr>
<th>Economic Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP - real growth rate</td>
<td>2.3% (2008 est.)</td>
</tr>
<tr>
<td>GDP - per capital (PPP)</td>
<td>$1,400 (2008 est.)</td>
</tr>
<tr>
<td>GDP - composition by sector</td>
<td>Agriculture: 28%</td>
</tr>
<tr>
<td></td>
<td>Industry: 20%</td>
</tr>
<tr>
<td></td>
<td>Services: 52% (2004 est.)</td>
</tr>
<tr>
<td>Labor force</td>
<td>3.6 million</td>
</tr>
<tr>
<td></td>
<td>Note: shortage of skilled labor, unskilled labor abundant (1995)</td>
</tr>
<tr>
<td>Labor force - by occupation</td>
<td>Agriculture: 66%</td>
</tr>
<tr>
<td></td>
<td>Industry: 9%</td>
</tr>
<tr>
<td></td>
<td>Services: 25% (1995)</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>Widespread unemployment and underemployment; more than two-thirds of the labor force do not have formal jobs (2002 est.)</td>
</tr>
<tr>
<td>Household income or consumption by percentage share</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lowest 10%: 0.7%</td>
</tr>
<tr>
<td></td>
<td>Highest 10%: 47.7% (2001)</td>
</tr>
<tr>
<td>Investment (gross fixed)</td>
<td>28.9% of GDP (2008 est.)</td>
</tr>
<tr>
<td>Budget</td>
<td>Revenues: $820.6 million</td>
</tr>
<tr>
<td></td>
<td>Expenditures: $965.2 million (2008 est.)</td>
</tr>
<tr>
<td>Inflation rate (consumer prices)</td>
<td>15.8% (2008 est.)</td>
</tr>
<tr>
<td>Commercial bank prime lending rate</td>
<td>46.99% (31 December 2007)</td>
</tr>
<tr>
<td>Industries</td>
<td>Sugar refining, flour milling, textiles, cement, light assembly based on imported parts</td>
</tr>
<tr>
<td>Electricity - production</td>
<td>549 million kWh (2006 est.)</td>
</tr>
<tr>
<td>Electricity - consumption</td>
<td>330 million kWh (2006 est.)</td>
</tr>
<tr>
<td>Oil - consumption</td>
<td>12,370 bbl/day (2006 est.)</td>
</tr>
<tr>
<td>Current account balance</td>
<td>-$664 million (2008 est.)</td>
</tr>
<tr>
<td>Exports</td>
<td>$491 million f.o.b. (2008 est.)</td>
</tr>
<tr>
<td>Exports - commodities:</td>
<td>apparel, manufactures, oils, cocoa, mangoes, coffee</td>
</tr>
</tbody>
</table>

---

### Communications Haiti

<table>
<thead>
<tr>
<th>Telephones - main lines in use:</th>
<th>150,000 (2006)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephones - mobile cellular:</td>
<td>2.2 million (2007)</td>
</tr>
<tr>
<td>Radio broadcast stations:</td>
<td>AM 41, FM 26, shortwave 0 (1999)</td>
</tr>
<tr>
<td>Television broadcast stations:</td>
<td>2 (plus a cable TV service) (1997)</td>
</tr>
<tr>
<td>Internet users:</td>
<td>1 million (2007)</td>
</tr>
</tbody>
</table>

### Transportation Haiti

<table>
<thead>
<tr>
<th>Roadways:</th>
</tr>
</thead>
<tbody>
<tr>
<td>total: 4,160 km</td>
</tr>
<tr>
<td>paved: 1,011 km</td>
</tr>
<tr>
<td>unpaved: 3,149 km (2000)</td>
</tr>
<tr>
<td>Ports and terminals:</td>
</tr>
</tbody>
</table>

Source: CIA Fact Book