## Market Assessment Study

# "Financing Sustainable Energy through Remittance Flows in Haiti and the Dominican Republic" 

Final Report

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# "FINANCING SUSTAINABLE EneRGY through Remittance flows in Haiti and the Dominican Republic" 

Final Report

## 1 Introduction

### 1.1 Report Objectives and Research Rationale

The goal of this market research was to determine the feasibility of promoting the use of remittances as a means to purchase clean energy. The project was designed to test the attractiveness to immigrants in more developed countries (the United States) of linking their remittance flows to the purchase of clean energy technologies in the developing world (Haiti and the Dominican Republic). The research was geared at assessing how much interest there was among remitters in targeting their remittances at improving the quality of life of their families in their country of origin through linking a portion of their remittances to clean energy purchases, and to test the interest of the receivers in this type of an arrangement. A key goal was to evaluate the desire of immigrants to control the use of the remittances that they send to their home countries.

Two countries were selected for research, Haiti and the Dominican Republic. These countries were interesting to compare because they both receive a relatively high number of remittances in relation to population size and they receive the bulk of their remittances from the United States and specifically the New York area. However, one of the countries has much lower electrification rates and much lower levels of political stability than the other. The research team anticipated that this would result in quite different levels of interest in the subject matter of the research.

Haiti has the lowest coverage of electricity in the Western Hemisphere, with only about $12.5 \%$ of its 8.9 million population (or 1.1 million people) having reliable access ${ }^{1}$. It is estimated that over 1 million Haitians live in the US with about 420,000 living in New York (these figures include undocumented workers) ${ }^{2}$. In 2008, Haiti received about US\$1.8 billion in remittances (which makes up about $20 \%$ of GDP). Haiti has suffered significant political and economic unrest for many years.

The total population of the Dominican Republic is about 9.5 million, with about 3 million people (or about $40 \%$ of the population) living in rural areas that do not have reliable sources of electricity ${ }^{3}$. About 1.2 million Dominicans live in the US with the largest concentration of Dominican immigrants in New York and New Jersey ${ }^{4}$. The Dominican Republic received approximately US $\$ 3.1$ billion in remittances in 2008 and despite the financial crisis remittances rates have increased by almost 5\%. The Dominican Republic is in a relatively stable political and economic situation at present.

The benefits of promoting clean energy in developing countries (especially those with low electrification rates) are well documented. Fostering access to electricity enables substantial improvement in living conditions of the poor and positively influences rural economic development. It provides opportunities to increase income and assets by extending the work-day or making the operation of machinery more efficient and effective. It provides health benefits by improving the air quality leading to less vision and

[^0]respiratory problems. It also enhances the effectiveness of social services by supporting education goals children and adults can study in the evenings under electric lights. There are also important gender implications in improving energy services for poor families, which particularly benefit women and girls. Most family's energy needs are met largely by women and children (especially girls), and time spent in fuel collection by women in fuel-scarce areas can range from 1 hour to 5 hours per household per day. Fuel and water collection limit the participation of children in school, impacting their literacy levels. Several studies also show that the number of households adopting electricity continues to grow for years after a village first receives electricity. Promoting the use of clean, renewable energy technologies also contributes towards the global objective of reducing greenhouse gas emissions.

While the benefits of promoting clean energy in developing countries are clear, until now it has not been clear that poor people would be willing to use their remittances for purchasing clean energy devices.

In an effort to address this knowledge gap, Arc Finance and BASE undertook this market research to determine if remittances are a viable source of end-user finance for the purchase of energy products in the developing world. The project team carried out in-depth market research in the form of three sets of focus group sessions - in New York, Haiti and the Dominican Republic respectively - to identify customer preferences and behavior relating to business models/mechanisms used for remittances, types of service providers, pricing structure and specific alternative energy products. Data was collected in New York during September and in Haiti and the Dominican Republic during October 2009.

## 2 Research Design

### 2.1 Hypothesis Generation

Based on background reading, the team developed several hypotheses to test in the course of the focus group research, including the following:

1. The longer time that remitters have been away the more they want to control the money they send home.
2. The longer time that remitters have been away the more likely they are to be willing to link their remittances to an energy product.
3. In a less-developed country with lower electrification rates (i.e. Haiti), the likelihood of remitters being willing to link their remittances to an energy product is higher.
4. It is more likely for people with banks accounts in the host or home country to be willing to link their remittances with an energy product.
5. It is more likely that people sending money to rural areas in the home country will be willing to link their remittances with an energy product.

### 2.1.1 Selection of Sustainable Energy Products

The team selected eight sustainable energy products to test with the focus group participants: a solar powered lantern; an all-in-one solar powered radio, a solar powered flashlight and cell phone charger; a solar home lighting kit; a solar cooker; a more efficient wood-burning stove; a solar water heater; a solar powered TV; and a solar water purification device (see Annex 3 for the description of the sustainable energy products as they were described to the participants). These products ranged quite considerably in price (from US\$35 to US\$900).

During the focus group sessions, the researchers intentionally provided very basic information about the products and deflected questions that participants had about the way the devices operated so as not to influence their opinions. Participants were asked to evaluate the utility and desirability of the products both before and after they were told the actual price of the product. They were also asked to guess how
much the item would cost commercially. These discussions led to lively debates about the relative merit of each item. It was interesting to note that opinions about the desirability of the product occasionally changed based on its actual price; not surprisingly, a cheaper price made the item more desirable and a more expensive price made it less so.

### 2.1.2 Development of the Business Models

During the preparation period the team also developed six different innovative business models that could in theory link remittances with energy in the receiving country. Each business model used different actors and/or different payment processes. During the course of the stakeholder interviews a seventh model was added on the basis of discussions with one of the Money Transfer Institutions (MTIs). The seven business models are outlined below:

1. Remittances to Savings Account Model (via bank or MTI): The remittance is sent by a traditional remittance provider from New York - for example a bank or an MTI - to a bank/microfinance organization (MFI) in the recipient country, where the money is put into a savings account that can used to purchase sustainable energy products.
2. Remittances to Loan Account Model (via bank or MTI): The remittance is sent by a traditional remittance provider from New York - for example a bank or an MTI - to a bank/MFI in the recipient country, where the money is put into a loan account that can be used to purchase sustainable energy products.
3. Remittances for Energy Product (via MTI): The remittance is sent through an MTI, which in turn buys the product from an energy vendor who delivers it to the client in the receiving country. This is in effect an in-kind remittance - in this model the remitter is purchasing the energy product directly from the MTI. The remitter can choose to have the sustainable energy product home delivered or picked up at a specific location in the recipient country.
4. Remittances for Energy Product (via Hometown Association/MTI): The remittances are used to purchase a sustainable energy product from an energy company but the interface is the website of the Hometown Association. The Hometown Association vets potential energy partners before agreeing to advertise their products and takes a small fee for providing the service. In this model the backend is provided by the MTI. [This was the additional model that was developed during the stakeholder interviews]
5. Remittances for Energy Product (directly from Vendor via internet using pre-paid card or credit card): The remittances are used to purchase a sustainable energy product directly from an energy company but the client chooses the energy device on the internet and pays either using a prepaid card or a credit card. This model also offers the client the option to pay in installments/via layaway (where the equipment would not be delivered until it is fully paid for) or pay directly in a lump sum (where the equipment would be delivered to the customer immediately).
6. Remittances for Energy Product (directly from Vendor in New York): The remittances are used to purchase a sustainable energy product directly from an energy company based in New York, which in turn delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.
7. Remittances for Energy Product (directly from Vendor in Haiti or the Dominican Republic): The remittances are used to purchase sustainable energy technology directly from an energy company that operates in Haiti or the Dominican Republic, and delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.

Each of these models was tested with the focus group participants (see Annex 4 for the description of the models as they were explained to the participants). Participants were told that these models were theoretical and that their opinion was being sought to determine the viability of each model as a potential means to tap remittances as a source of funding for sustainable energy products. Despite this, a number of participants wanted to know where these models were operating in practice and how they could become involved either from a business perspective or as a client.

### 2.1.3 Stakeholder Interviews

Prior to and in parallel with the focus group sessions, the team interviewed a range of stakeholders that included banks, Microfinance Institutions (MFIs), Money Transfer Institutions (MTIs), energy companies, hometown associations and policy makers. The stakeholder group included organizations that might be potential implementing partners in the future. The goal of the interviews was to test the business models that were being developed. The interviews served as an excellent means to evaluate the practicality of the business models and helped to refine the approach being planned for the focus groups.

## Interviews with Financial Sector Stakeholders

In general, the financial sector stakeholders from Haiti showed a deep understanding of the electricity challenges that Haitians were facing and were interested in exploring potential business opportunities related to meeting these needs. In contrast, the financial sector stakeholders in the Dominican Republic appeared to be less interested in the potential business opportunities presented by this research than their Haitian counterparts. More in depth interviews with Dominicans revealed that this phenomenon was not so much a case of being unaware of the dire energy situation in the Dominican Republic, but more a feeling that it was the responsibility of government to fix the problem.

MTIs were particularly interested in the research and models. The team uncovered a range of the innovative approaches that MTIs have adopted in Haiti and the Dominican Republic to adapt to changing market conditions. In order to stay competitive, these companies are providing a whole set of delivery services that did not exist previously. Some MTIs have developed specialized services where customers can send food, flowers and appliances in addition to money. These items are sometimes delivered directly to the recipient in the home country, or they are delivered to a warehouse where the recipient can collect the item at his or her convenience. The team incorporated this process into one of its business models and tested the attractiveness of this process with Remitters and Receivers for sending sustainable energy products. Shortly after the focus group research began, the team created a variation on this model where the interface for selecting the energy product would be the website of the Federation of Hometown Associations (with an MTI as the backend). The team tested this additional model with participants in subsequent focus group sessions.

## Interviews with Sustainable Energy Technology Vendors

In conducting the interviews with energy technology vendors, the researchers were struck by the difficult conditions that the local enterprises face in trying to develop a local sustainable energy market and sell their products. The main challenge experienced by the vendors was the high up-front cost of purchasing and storing the energy devices for resale, and finding appropriate end-user finance to enable their clients to purchase the devices. The vendors indicated that they would be able to sell their products much more effectively and reduce their risks, if the more expensive energy devices were financed through an established financial institution rather than if the products were purchased with cash in advance. The researchers also discovered that the current set of vendors operating in the target market, are mostly small and medium enterprises. At present these institutions are too small to allow for the mass expansion of a remittances-based model, at least in the short-term.

Because of the relatively small size of the energy enterprises operating in Haiti and the Dominican Republic, the team interviewed proxy energy enterprises that operate in other parts of the world to test the business models. The unexpected consequence of this was to generate considerable interest in serving the Haitian market by energy companies that are not currently operating in the Haitian environment. Vendors both inside and outside the Haiti/Dominican market were very enthusiastic about potential alliances with financial institutions that would allow their clients to tap into the remittances market to finance the purchase of sustainable energy devices.

The interviews with vendors were designed to better understand the technologies and devices that are more known, requested and appropriate for the local markets. The team provided the vendors with different technology options - solar photovoltaic energy, solar thermal technology, biogas, mini wind turbines, biomass, energy efficiency devices - and vendors recommended that solar photovoltaic and thermal technologies were the ones that would be most accepted and appropriate for the local conditions.

## Summary

Perhaps not surprisingly, each stakeholder showed more interest in the business model that featured players from the sector in which it operated (e.g. MTIs expressed more interest in models featuring MTIs etc.). Some stakeholders expressed real interest in developing a pilot project to test a specific business model in practice. The team assessed the feedback from the interviews in the context of the market research results with Remitters and Recipients and identified a number of potential follow up projects with a sub-section of these actors that will be outlined in the recommendations section of this report.

## 3 Field Research

The team conducted in-depth field research with multiple focus groups in New York, Haiti and the Dominican Republic.

### 3.1 Research Goals and Objectives

At the outset, the team identified a set of research goals and objectives for Remitters and Recipients.
There were several goals embedded in the research that focused on Remitters:

- To identify the Remitter's interest in controlling the use of the money sent for the purchase of sustainable energy products.
- To assess the Remitter's perspective on the current situation of the energy supply and demand in Haiti and the Dominican Republic and its impact on their families.
- To assess the extent of the Remitter's knowledge about sustainable energy products.
- To assess the appetite of Remitters to link their remittances to the purchase of sustainable energy products.
- To understand the different mechanisms ("Models") by which Remitters can link their remittances to the purchase of sustainable energy products.

There were additional goals embedded in the research that focused on Recipients:

- To assess the level of demand among Recipients in Haiti and the Dominican Republic for sustainable energy products.
- To verify the current situation of the energy supply and demand in Haiti and the Dominican Republic.
- To assess the extent of the Receiver's knowledge about sustainable energy products.
- To identify perceptions about the positive and negative aspects of the most frequently used mechanisms to obtain these products.


### 3.2 Focus Group Methodology

A total of six focus groups were conducted with Remitters in the New York area. Three of them included participants of Haitian origin, and three included Dominicans. An additional six groups were conducted with Recipients. Three of them were carried out in Haiti, in the Northern town of Ganthier (rural), in Mirebalais (rural) and in Hinche (urban) in the Centre region. The other three groups were held in the Dominican Republic in the capital city, Santo Domingo East, in the Southern town of Bani (rural) and in the Northern town of Bonao (rural).

Each group had a maximum of 12 participants, with a previously defined demographic profile linked to the research objectives. In addition, each group included a diversity of participants in terms of people living in different neighborhoods and engaged in a variety of job activities. As they arrived at the meeting, the participants were each given a Basic Information Questionnaire, which gathered specific information about the participant before the meeting began. These questionnaires were later used to create subject profiles, which are embedded in Annex 1 and 2 of this report. During the focus group meeting, the moderator led the discussion based on a Topics Guide tailored to the research objectives. Each session lasted approximately two hours.

## Socio-demographic Profile of Participants in the Study

- Countries: The full study took place in three different countries: USA (New York) (six groups), Haiti (three groups) and Dominican Republic (three groups).
- Origin: Participants were divided by place of origin: 1) Haitians in NY (three groups); 2) Dominicans in NY (three groups); 3) Local people in Haiti (three groups); 4) Local people in Dominican Republic (three groups).
- Role: Participants were divided into two different roles: 1) Remitters (Haitian and Dominican immigrants); 2) Recipients (Haitian and Dominican relatives and friends). There were six focus groups per role.
- Sex and Age Range: All groups included participants of both sexes, with a balanced number among them. The age range was between 18 and 64 years of age.
- Area: The six groups with Remitters included participants with family members in both urban and rural areas. The six groups with Recipients were held mostly in the rural area (two groups per country), but there were also groups in urban areas (one group per country) to ensure representation of different country zones. The hypothesis being tested was: "It is more likely that people sending money to rural areas in the home country will be willing to link their remittances with an energy product."
- Education Level: Groups were divided into higher and lower education levels. Since some of the sustainable energy products presented varied in price, it was important to include participants with different education levels as a proxy for income level, based on the assumption that the higher the education level, the higher the income level was likely to be. The higher education levels included: high school, technician and college (finished or unfinished). Lower education levels included: elementary school and junior high.
- Time Money Sent/Received: Groups were also divided into people that had received/sent money for more or less than five years. Some groups included participants with both characteristics. The team did this to test two hypotheses: "The longer that Remitters have been away, the more they want to control the money they send home" and "The longer time that Remitters have been away, the more likely they are to be willing to link their remittances to a sustainable energy product."

In addition, each group included participants with banking knowledge (measured in terms of participants with varied experience in using banks, credit cards and on-line banking) and prepaid-card knowledge (measured in terms of varied experiences in using gift cards, telephone cards or any other type of prepaid cards). Recipient groups included a variety of participants in terms of quality of electric service (measured in terms of people with or without energy problems, such as blackouts, and in terms of people who were
and were not connected to the grid). Recipient groups always included people who received money from New York.

Finally, groups were conducted in four different languages: English (NY Haitian Remitters); Spanish (NY Dominican Remitters and local people in DR); French and Creole (local people in Haiti).

While this qualitative study does not have statistical value, it provided useful information that enabled the researchers to understand the reasoning and mental processes that people go through when forming their opinions, attitudes and values.

## 4 Research Results

The results of the research indicated a very strong desire by not only Haitians (which was anticipated at the outset) but also by Dominicans on linking remittances to energy related products (see Annex 1 and Annex 2 for detailed reports of the responses by Remitters and Receivers respectively). In fact, when asked about the current role of remittances in addressing the local energy situation, Remitters reported that about $25 \%$ of the money they send is used to pay for energy/electricity bills already and Receivers confirmed this.

### 4.1 Findings Related to the Energy Situation in Haiti and the Dominican Republic

The team found that both senders and receivers felt that energy was a top household priority irrespective of the country, and especially in the rural areas. On the Haitian side, the low electrification rate clearly affected everyone in dramatic ways. People talked about the lack of light at night, the lack of refrigeration, the lack of hot water, challenges with cooking, and the inability to use mechanical devices etc. On the Dominican side, while the electrification rate is not as low as Haiti, people expressed deep frustration at the lack of real access, noting the daily reality of blackouts and the common practice of poaching electrical access (including the dangers associated with this). It became clear that in Haiti the issue is the lack of infrastructure, whereas the problem in the Dominican Republic is the unreliability of the existing electricity system and the illegal wiring.

Remitters from both countries talked about the conditions their families lived in back home and also about the experience of being a visitor, and how inferior the living conditions were compared to their New York lifestyles. They explained that many of their family members basically do without energy. Both Remitters and Receivers described a range of ways in which families in Haiti and the Dominican Republic addressed their energy situation. Tactics ranged from combining energy sources (e.g. candles, batteries and kerosene lamps), to purchasing inverters and/or generators, to changing living habits by either doing without energy or alternating energy sources among home appliances, to stealing electricity from the grid.

Stealing electricity seemed to be especially widespread in the Dominican Republic where people were very open about the different means by which electricity was stolen, including connecting to other people's lines, having double connections, having two meters, tampering with the electricity bills and stealing the electric cables. In their minds, stealing was justified because they felt it was unfair that they were paying for a service that was not being provided to the point where they were being forced to spend additional money in order to purchase an energy source to compensate for this situation. Their main complaint was that they simply do not get good reliable service and many of them said they were willing to do what ever it took to get reliable service.

### 4.2 Findings Related to Knowledge About Sustainable Energy Devices

The researchers discovered that a surprising number of the Remitters were savvy about clean energy devices. The Haitians expressed deep concern about the high level of deforestation in Haiti due to the fact
that people use wood for cooking, and most of them were aware that sustainable energy technology was good for the environment. A number of the Remitters were very familiar with solar energy and some of them already owned solar panels. It was interesting to watch these people educate other participants about the benefits of solar energy, pointing out that there are no electricity bills to pay, it is a reliable source of energy over a long period of time, it offers self-sufficiency and independence from electricity companies, and as a bonus, the clean energy sector can create new jobs for people in maintenance and installation.

Among Remitters, there was a huge appetite for the sustainable energy products presented by the researchers. They were excited to see the different products, and expressed enthusiasm about using their remittances to provide their families with access to electricity - particularly because there was deep skepticism that the government would be in a position to do so any time soon. Many participants said they wanted all of the products presented, and some asked about the existence of other sustainable energy products (the concept of a solar refrigerator was raised by several people). As they thought more deeply about acquiring these items, however, various doubts were raised; a key practical concern was whether the solar products would work at night and during rainy seasons. In general, both Remitters and Recipients wanted to have a demonstration on how the products would work and expressed interest in learning more about them. The chart below illustrates the preferences tiers for the products that were discussed in the focus group sessions by the participants.

Sustainable Energy Devices: Preference Tiers

| Category | Sustainable Energy Products |  |  |
| :---: | :---: | :---: | :---: |
| "Most Preferred" | Radio, flashlight and cell phone charger - $\$ 35$ |  |  |
| "Sometimes |  |  |  |
| Preferred" | Solar home lighting kit - $\$ 500$ | Solar cooker - $\$ 190$ |  |
| "Least Preferred" | Wood burning stove - \$40 |  |  |

The most popular items for both Remitters and Receivers were the Radio, Flashlight and Cell Phone Charger (\$35) and the Lanterns (\$27). The reasons given were that these devices were practical, portable, cheap and not so vulnerable to theft (compared to solar panels). Many people wanted to know where they could be bought and said they would like to give them as gifts immediately.

The next most favored item was the solar home lighting kit ( $\$ 500$ ), which both Remitters and Receivers felt would solve the lighting needs of families in Haiti or the Dominican Republic and would also save money in the long-term. However, some people were disappointed that such an expensive product only provided lighting and would not help them to power other necessary appliances, like the refrigerator, the fan or TV. Others were concerned that it could be easily stolen. This led to an interesting conversation about strategies to prevent theft of solar devices, including securing the panels with an iron grill, making the panel heavier, sealing the panels with cement, and moving them inside the home when it gets dark.

Both the solar stove (\$190) and the wood-burning stove (\$40) were next in priority. The advantages cited for the solar stove were that it was environmentally friendly (not only because it does not pollute but also because it doesn't require trees to be cut down), it was a good substitute for gas, saves money, and is portable. However critiques of the solar stove were that it was too small (participants noted that families in Haiti and Dominican Republic are large and cooking is done for large groups), it would not work at night when the sun is not available, cooking would take too long and the price was higher than most people expected. The researchers noted that more women than men seemed interested in buying a solar cooker both among the Remitters and the Receivers, perhaps reflecting the fact that the burden of cooking rests more on women than men in these countries and so the incentive to find a viable solution to cooking challenges rests more heavily on women. Even after learning the price, some women insisted that it was the ideal gift

The efficient wood-burning stove was controversial among Haitians because of the fact that although it burns less wood, it still uses wood and many of the Haitian participants expressed concerns about the potential effects of the stove on the environment. However, several people dropped their proenvironment argument when they found out how cheap the item was. Dominican participants were less interested in the product and seemed to have a broader range of cooking fuel/device alternatives than the Haitians.

The solar water purification system (\$480) was controversial in a different way. Initially, participants were very eloquent in describing the importance of clean water in Haiti and the Dominican Republic to combat the widespread sickness due to contaminated water. However, the market price of \$480 caused participants to shift their opinions and they ended up focusing on its low output capacity.

When the solar TV (\$900) was shown, participants were surprised that it was even an option and found it very expensive. They noted that its major disadvantage was that it needed to be charged for six hours in order to be able to provide electricity for three hours of TV. Most of the participants felt that a solar TV was not a priority.

The solar water heater was viewed by most participants as an expensive luxury item which they did not feel was really addressing a pressing need. Participants noted that water in Haiti and the Dominican Republic was already hot enough and few participants said they would be willing to buy one.

### 4.3 Findings Related to Transfer Mechanisms

Haitian and Dominican participants in New York have a long tradition of sending remittances. They use a number of methods, including Money Transfer Institutions (MTIs), person-to-person delivery, microfinance institutions, as well as bank and Internet transfers. Their most preferred method to send money is via the transfer agencies and the method of transferring money is a decision that depends primarily on the Remitter.

The most valued attributes by Remitters when choosing a transfer agency were the following:

- Proximity: in terms of branches conveniently located in New York and closeness to the Recipients' address.
- Cost: for sending $\$ 100$ dollars (whether it is $\$ 4, \$ 5$, $\$ 9$ or a flat fee of $\$ 10$, regardless of the amount, as well as fees for amounts higher than $\$ 1,000$ dollars).
- Reliability and safety: to ensure that the money arrives, especially in cases of emergencies.
- Home delivery: as it implies convenience for family members, savings because there are no transportation costs, and security as it can be dangerous to pick-up money at branches.
- Good customer service: for example, keeping records of money sent and family information in a database, as well as getting points or a free pre-paid calling card to let their families know that the money was already sent.
- Favorable currency arrangements: where the money is delivered in dollars rather than local currencies that devalue quickly.


### 4.4 Findings Related to the Business Models

In terms of the business models, Remitters were open to any model that in their view could get the money to their relatives in a quick and effective way for the purchase of these clean energy devices. The clear preference was for a model that involved the most direct contact between the purchaser and the vendor. As a result of this, most of the discussions focused on the two models that provided a direct link to the vendor: Model 7, where the Remitter or Recipient buys the product directly from the vendor in Haiti or in the Dominican Republic; and Model 6, where the Remitter buys the product directly from the vendor in New York and the family receives it in Haiti or the Dominican Republic. What was most attractive about these two models for the participants was that they allowed for direct purchasing with no transfer agencies or banks as intermediaries. In the section below, each of the models is described sequentially with the most desirable models described first.

## Model 7

In this model, the remittances are used to purchase sustainable energy technology directly from an energy company that operates in Haiti or the Dominican Republic, and delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.

This model was cited as being attractive because participants felt it would be more cost effective. They felt that through this model, Remitters would be saving on shipping and delivery costs, taxes that need to be paid in the United States before sending the item and custom fees and problems in Haiti or in the Dominican Republic when the product is received. The other benefits of buying from a local vendor were that there would be no risks of product damage during transportation, and the local vendor could provide product installation, maintenance and guarantees. However, there were some concerns about the geographic location and accessibility of the vendors in Haiti or the Dominican Republic, given that some families might need to travel quite far to get the product. A Dominican participant suggested creating a system similar to Avon, where micro vendors in small towns could sell the products and make home demonstrations to show how the item works. The person pointed out that this would also increase jobs at home. Many participants of both nationalities strongly supported models that would improve the job markets locally.

## Model 6

In this model, the remittances are used to purchase a sustainable energy product directly from an energy company based in New York, that delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.

This model was cited as being attractive because the Remitters could see the product themselves and work out how it functions before sending it to their relatives. Many participants indicated that they would
only prefer this model (as opposed to buying the product from a vendor in Haiti or in Dominican Republic, Model 7) if the vendor in New York delivered the product directly to their families. They said they would not want to deal with the problems and costs associated with sending products themselves. They pointed out that with direct delivery the vendor takes care of shipping and what it entails (costs, custom hassles, storage and liability if the product is damaged in transit). Some participants also felt the products would be better quality and cheaper in the United States (in part because of the high taxes in the Dominican Republic). Others noted that with this system they could really ensure that the money was used for a sustainable energy product and was not spent on something else.

## Model 3

In this model, the remittances are sent through an MTI, which in turn buys the product from an energy vendor who delivers it to the client; it is in effect an in-kind remittance used to purchase energy products directly from the MTI. The remitter can choose to have the sustainable energy product home delivered or picked up at a specific location in the recipient country.

This was the third most favored model and those participants who favored it explained that this model gave them closest access to the vendor after the direct purchase models. Several noted that they already had some experience with the model and had sent/received food or flowers with MTIs that offered this service. Haitian participants said they found the model attractive because they viewed it to be "a proven system". Advantages of this model were that the product could be delivered locally and be stored safely while the family picks it up. People felt it was a more secure system than sending the product themselves or sending money to their relatives to purchase the product locally. They also noted that it allows significant control of the remittances. Critics stressed that working with an MTI added extra costs, and they expressed concerns about the reliability of the delivery process of the product locally.

## Model 4

This model is a variation on Model 3, and in this system, the remittances are used to purchase a sustainable energy product from an energy company but the interface is the website of the Hometown Association. The Hometown Association vets the various energy partners before agreeing to advertise their products and takes a small fee for providing the service. In this model the backend is provided by the MTI.

The concept of buying sustainable energy products through an Association of Haitian or Dominican people living in the US was attractive mainly to Remitters who were part of an Association (the minority) and with quite specific conditionalities. Many Remitters said they would only consider it if they were given an extremely good deal. They argued that the best case scenario for this model would be that an alliance between a Vendor and an Association should result not only in lower product prices for members (because the Association was buying in bulk), but also in payment alternatives, product guarantees, and the ability to see the products displayed locally at the Association. If it offered these benefits, then the Association would be truly looking out for its members in the US and their families abroad. Many people were skeptical that this arrangement would work well in practice, they speculated that the buying process could get longer and more confusing, they were wary of Associations getting into business ventures and felt that some people might take inappropriate advantage of money related issues. Dominican Remitters pointed out that few immigrants are members of Associations and therefore this model was not so appealing to them.

## Models 1 and 2

In Model 1, the Remitter sends the money through a traditional remittance provider in New York - for example a bank or a money transfer organization - to a bank/MFI in the recipient country, where the money is put into a savings account that can used to purchase sustainable energy products. In Model 2, the Remitter goes through the same process but the money is put into a loan account that can used to purchase sustainable energy products.

In general, both Remitters and Recipients expressed little interest in opening a savings account or taking out a loan to buy sustainable energy products. The savings model was viewed as complicated and unrealistic given that most people in Haiti and the Dominican Republic do not have bank accounts and savings is not a widespread cultural habit. Critiques of the model by Remitters focused on the fact that they did not want to deal with the paper work involved in opening a savings account, they were concerned about whose name the savings account would be in, they did not like the idea of giving someone the power to withdraw the money locally, and were concerned about how they would manage an account from New York. Those who liked the model stressed that saving money is a good principle in general and noted that a savings account could operate like a lay-away system or a short-term savings mechanism.

The loan model was deemed unattractive because loans were viewed as expensive and complicated; banks ask for collateral (which most people do not have) and require lots of paperwork, interest rates are high, remitters were not comfortable taking out a loan in another country and were not sure how the process would work so that their risks were minimized. They felt that gifts should not be covered with a loan. Many said that most of products that they wanted (with the exception of the solar panels) were quite affordable and that they would save the money on their own or buy the products in one lump sum. Among the few participants who expressed some interested in taking out a loan, there was no consensus on the best place to do the transaction - some people felt it would be better to take out a loan in the United States because they believe that interest rates are lower there; other people argued exactly the opposite case and said they would only take a loan from a bank in Haiti or the Dominican Republic because they did not think they could get credit in the United States; and finally, there were people who said they would consider taking a loan from the vendor directly, never from the banks.

## Model 5

In this model, the Remitter purchases a sustainable energy product directly from an energy company but the Remitter chooses the energy device on the Internet and pays either using a prepaid card or a credit card.

It was a little difficult to place this model because participants presented somewhat contradictory messages about it. On the one hand, buying products on-line was unfamiliar to a large majority of Haitian and Dominicans participants in New York and most Remitters said they did not have access to the Internet, and were afraid that on-line purchasing would make them vulnerable to identity theft. However, the fact that this model allowed for the opportunity to buy directly from the vendor made it theoretically attractive to a number of participants. Advantages cited were that an on-line purchasing system would be faster, more convenient and allow tracking of the product and might also lower the price of the item (since there is more competition on-line). Remitters also noted that the model allowed real control over the use of the remittances since in this model the product is pre-selected and purchased on-line and is then delivered to the family. Disadvantaged cited included concerns about the potential vendor's reliability, who would bear the burden of shipping costs, who would provide the guarantee, and who would explain how the product works. The overall impression was that on-line buying is still not so common among Haitians and Dominican Remitters and is even less common for their families abroad and that as a result at present the model would probably not be so successful in practice.

This model also tested two different payment alternatives: lump sum or installments. In general, Remitters confirmed that the attractiveness of both options depended on the price of the item and the number of products being purchased, but preferences were fairly evenly divided. Those who would rather pay in a lump sum indicated that it saves future headaches with payments and concerns about delivery times. On the other hand, those who were willing to pay through small installments said that they wanted their families to obtain the merchandise quickly before the payment is completed in full. They referred to the fact that because of the financial crisis, merchants are changing the way they do lay-aways, and now they give you the product even if you have not finished paying for it.

While Recipients engaged in discussion on each of these models, they expressed a clear preference for just receiving the remittances and purchasing the devices directly themselves (Model 7). Recipients cited many reasons as to why they would prefer to receive the money directly and not depend on Remitters to send the product. They argued that their relatives living abroad would not actually get the products for them, that Remitters were living under different circumstances and might not understand the real local needs, or that they simply did not want to wait for an eventual gift. Recipients also said that they would prefer to choose the product themselves because the Remitter might buy something different than the items that local people truly need. Some said they would feel more confident buying the product in a store that was familiar to them, and that buying the product locally would save shipping, delivery and custom fees, as well as worries about possible robbery or product delays at customs. Lastly, some participants referred to the benefit of having a guarantee with a local vendor, and the comfort of knowing that the product would not be damaged while being transported.

### 4.5 Findings Related to Controlling Remittances

The original hypothesis was that the longer the Remitters were away, the more they would want to control the money they send home. The team found that the desire to link remittances to clean energy seemed to be very strong irrespective of how long the person had been away from the home country, however, the story about whether or not the Remitters wanted to control the money was rather complicated.

When asked if they wanted to control the money they send home, the majority of Remitters said they did not want to, that the money was a gift and once the money was sent it was up to the receiver to decide how to use it. They also said it would be insulting to their families if they tried to control the use of the money they send. However, it became clear that even if they did not want to call it "controlling" some Remitters had found subtle ways to control the money: by paying for school bills directly; by sending a specific remittance to pay rent, mortgages or medicines; by making payments directly to a hospital when someone was sick; or by buying household items for their families directly from a manufacturer or vendor. In addition, as they relaxed, some Remitters admitted that they had concerns that their families were not using the money appropriately - for example buying fancy clothes or spending the money on alcohol or on parties - and they felt strongly that they should control the money more. There was consensus that controlling the money was a necessity in certain situations for example in business transactions, if it was being sent for a specific community service or when supporting an organization.

Remitters said that they would be willing to increase control of the money they send in order to ensure that family members got access to sustainable energy products. Before the presentation of the sustainable energy products, participants expressed some reluctant about exercising real control over the remittances, but there was a change of mindset after they had seen the products. They explained this attitude shift by pointing out that otherwise the money would not be used to buy the sustainable energy products. They also noted that they were resigned to the fact that providing any of these products would cost them additional money because they would have to provide these products on top of whatever they were already sending to their families already.

### 4.6 Summary Research Findings

The results of the research indicated a voracious desire by both Haitians and Dominicans for linking remittances to energy related products and the research clearly established that remittances are a viable source of end-user finance for the purchase of energy products in the developing world.

Remitters reported that about $25 \%$ of the money they send is already being used to pay for energy/electricity bills, and Receivers confirmed this. The most preferred method to send money is through the transfer agencies and the method of transferring money is a decision that depends primarily on the Remitter. Remitters indicated that they were willing and interested in controlling the remittances they send home in order to ensure that their families get access to sustainable energy products.

The team identified the most and least desirable sustainable energy products for this set of participants, as well as the key factors that gave them these attributes. The most popular items were the solar powered radio, flashlight and solar cell phone charger and the solar powered lanterns, because these devices were practical, portable, cheap and not so easy to steal. The least popular items were the solar TV and the solar water heater because these devices were deemed unnecessary, expensive, luxury items that were not a priority.

The team also identified the most and least desirable business models to link remittances and alternative energy products. The clear preference for both Remitters and Recipients was for a model that involved the most direct contact between the purchaser and the vendor. The least attractive models were the ones that involved complex transactions with multiple financial actors.

As part of the interviews carried out with vendors, sustainable energy device distributors and retailers indicted that they would be able to sell their products much more effectively, and reduce their risks, if the energy devices were financed rather than if the products were purchased with cash in advance. It became clear that existing and potential vendors would prefer to mitigate their risks by working with a financial institution rather than directly with the client. It also became clear that the current vendors, which are mostly small and medium enterprises, have too small a structure to allow for the mass expansion of the models in the short-term. Vendors both inside and outside the Haiti/Dominican market were very enthusiastic about potential alliances with financial institutions that would allow their clients to tap into the remittances market to finance the purchase of sustainable energy devices.

As part of the interviews carried out with financial institutions, it became clear that MTIs were best suited to, and most interested in, adapting their business models to include sustainable energy products as items that could be purchased through remittances. Banks and MFIs were more wary of entering this market, and both Remitters and Recipients were less enthusiastic about taking out loans or using saving to pay for these devices. However, energy vendors selling more expensive items were anxious for a more stable source of financing for their products, preferably from a formal financial institution.

## 5 Recommendations

After analyzing the data from the in-depth focus groups and the stakeholder interviews, the Arc /BASE research team concluded that Model 7 (Remittances for Energy Product - Direct From Local Vendor) and Model 3 (Remittances for Energy Product - Via MTI) are the two most viable models for a potential pilot project for tapping remittances as a source of end-user finance for sustainable energy products. The Arc /BASE team strongly suggests that operating two pilots simultaneously would radically increase the potential for scale in this area. The team felt that in the initial period the focus of a pilot project should be on Haiti, because while there was strong demand and need in the Dominican Republic, the need was substantially greater in Haiti and depending on success rates, the pilot projects could be rolled out to the Dominican Republic at a later date.

## Model 7: Remittances for Energy Product - Direct From Local Vendor

In Model 7, the remittance is used to purchase sustainable energy technology directly from an energy company that operates in Haiti or the Dominican Republic, and delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country. This model was attractive to both Remitters and Receivers, because it allowed for direct contact with the vendor and potentially increased jobs in the home country.

Business Challenge of Model 7. Model 7, however highlights a significant gap in the energy supply chain in Haiti - while there are sophisticated international manufactures/importers that are anxious to sell sustainable energy products in the Haitian market, as well as clients that are anxious to consume these
products, there is not a developed set of local distributors. Those local distributors that exist are small and not yet able to serve a national market. There is in effect an "energy distribution gap"

Manufacturers

Importers
Distributors
End-Users

Solutions. The Arc/BASE team has identified two key solutions to address this energy distribution gap:

1. One solution is to build the capacity of local energy suppliers by helping them to develop their existing businesses functions (e.g. service and maintenance, financial management, marketing, inventory management, storage, transportation, importing/customs duties management etc.) and helping them to design and build business models that focus on growth (e.g. microfranchising). The advantage of this solution is that it is key to the long-term development of the Haitian sustainable energy market, and provides for instillation, maintenance and service of larger solar home systems, which Haiti lacks. The disadvantage of this solution is that it is a relatively slow growth solution. In addition, with this solution it is challenging to tie in remittances as a financing source (existing Haitian energy companies stressed that their preferred way to tie in remittances would be through a formal financial institution, and this was in fact the least favorite choice among the focus group clients).
2. The other solution is to identify an alternate distribution channel where an enterprise in a different but complimentary business sector has a business interest in working as a distribution channel for sustainable energy products. The most promising sector identified by the Arc Finance/BASE team is the telecom sector. The concept would be that a Haitian cell phone company with national coverage sells smaller energy devices such as multi purpose lanterns that also charge cell phones directly to consumers in Haiti (these were the most popular items among the focus group participants). The advantage of this solution is that a cell phone company with strong national coverage is likely to be able to deal with marketing, inventory management, storage, transportation and importing/customs issues - all of which are key for rapid scale. This solution is also much easier to tie into remittances as a financing source as recipients are already receiving "remitted" phone minutes for their families back home and cell phone. The disadvantage of this solution it that it is not well suited to financing larger solar home systems (and as such only contributes in a partial way to the long-term development of the Haitian sustainable energy market). It will also be key to ensure that the cell phone companies team up with reliable international importers that sell high quality energy products for the poor.

The Arc/BASE team recommends that out of these two choices, phase two should focus on alternate distribution channels in order to test whether a phone company/energy company partnership can promote rapid scale in getting high quality, relatively inexpensive sustainable energy devices into the hands of poor people.

## Model 3: Remittances for Energy Product - Via MTI

In parallel, the Arc Finance/BASE team strongly recommends an investment in developing and scaling Model 3, where the remittances are sent through an MTI, which in turn buys the product from an energy vendor who delivers it to the client. The remitter can choose to have the sustainable energy product home delivered or picked up at a specific location in the recipient country. This model was attractive to participants because they viewed it to be "a proven system" and because it allows for significant control of the remittances. It is probably best suited for financing smaller, less expensive sustainable energy systems. This model also allowed for potential future expansion via Model 4, which focused on partnerships with Hometown Associations as marketing agents/outlets.

Business Challenge of Model 3. Model 3 is in fact already in operation in Haiti for non-energy related appliances, however the MTIs that are currently using this system have indicated that to add sustainable energy devices to the list of products they offer, they need to be connected to reliable international manufactures/importers of sustainable energy products and it would be very helpful for them to find additional creative marketing outlets in the US that immigrants trust, to inform immigrants about the business model and convince them to try it.

The first challenge can be addressed by brokering partnerships with international suppliers of sustainable energy products. The second challenge can be addressed through brokering a partnership with a Haitian Federation of Hometown Association, which is naturally positioned to serve as an information source on the sustainable energy products and are well-trusted by the immigrants.

## Annex 1: Final Report Remitters

# Focus Groups in New York with Haitian and Dominican Immigrants <br> "Financing Sustainable Energy through Remittance Flows in Haiti and the Dominican Republic" 

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## INTRODUCTION

The ultimate goal of this market research is to determine the feasibility of promoting the use of remittances as a means to purchase clean energy. Two countries have been selected for research, Haiti and the Dominican Republic.

Haiti has the lowest coverage of electricity in the Western Hemisphere, with only about $12.5 \%$ of its 8.9 million population (or 1.1 million people) having reliable access. It is estimated that over 1 million Haitians live in the US with about 400,000 living in New York (these figures include undocumented workers). In 2008, Haiti received about US\$1.8 billion in remittances (which makes up about $20 \%$ of GDP). Haiti has suffered significant political and economic unrest for many years.

The total population of the Dominican Republic is about 9.5 million, with about 3 million people (or about $40 \%$ of the population) living in rural areas that do not have reliable sources of electricity. About 1.2 million Dominicans live in the US with the largest concentration of Dominican immigrants residing in New York and New Jersey. The Dominican Republic received approximately US\$3.1 billion in remittances in 2008 and, despite the financial crisis, remittances rates have increased by almost 5\%. The Dominican Republic is in a relatively stable political and economic situation at present

Fostering access to electricity enables substantial improvement in living conditions of the poor and positively influences rural economic development. It provides opportunities to increase income and assets by extending the workday or making the operation of machinery more efficient and effective. It provides health benefits by improving the air quality leading to fewer vision and respiratory problems. It also supports education goals - children and adults can study in the evenings under electric lights. The number of households adopting electricity continues to grow for years after a village first receives electricity. Promoting the use of clean, renewable energy technologies also contributes to the global objective of reducing greenhouse gas emissions. Arc Finance undertook this market research to determine if remittances are a viable source of end-user finance for the purchase of energy products in the developing world. Data was collected in New York during September 2009 and in Haiti and the Dominican Republic during October 2009.

## OBJECTIVES

There were several goals embedded in the research that focused on Remitters:

- To identify the Remitter's interest in controlling the use of money sent for the purchase of sustainable energy products.
- To assess the Remitter's perspective on the current situation of the energy supply and demand in Haiti and the Dominican Republic and its impact on their families.
- To assess the extent of Remitter's knowledge about sustainable energy products.
- To assess the appetite of Remitters to link their remittances to the purchase of sustainable energy products.
- To understand the different mechanisms ("Models") by which Remitters can link their remittances to the purchase of sustainable energy products.


## METHODOLOGY

$\checkmark$ Focus Groups. This qualitative market research tool is based upon group discussions of a maximum of 12 participants, with a previously defined demographic profile according to the research objective. In addition, each group included participants living in different neighborhoods and engaged in a variety of job activities.

Upon arrival at the meeting, the participants were each given a basic information questionnaire, in order to gather specific information before beginning the meeting. People were asked to write down their personal experiences on the subject matter in the questionnaire, which made their verbal expression during the discussion easier.

During the focus group meeting, the moderator led the discussion of topics related to the study based on a Topics Guide. The dynamic of the discussion encouraged participants to fully articulate their opinions in order to identify a rich range of views on the subject. Each session lasted approximately two hours. Though it has no statistical value,
this qualitative study is very useful in order to understand the reasoning people go through when forming their opinions, attitudes and values.

## $\checkmark$ Socio-demographic Profile of all Participants in the Study (including Recipients)

- Countries: The full study took place in three different countries: USA (New York, six groups), Haiti (three groups) and Dominican Republic (three groups).
- Origin: Participants were divided by origin: 1) Haitians in NY (three groups); 2) Dominicans in NY (three groups); 3) Local people in Haiti (three groups); 4) Local people in Dominican Republic (three groups).
- Role. In terms of the research objective, participants were divided into two different roles: 1) Remitters (Haitian and Dominican immigrants); 2) Recipients (Haitian and Dominican relatives and friends). There were six focus groups per role.
- Sex and Age Range: All groups included participants of both sexes, with a balanced number among them. The age range was between 18 and 64 years of age.
- Area. The six groups with Remitters included participants with a family of origin in both urban and rural areas. The six groups with Recipients were held in mostly in the rural area (2 groups per country), but there were also groups in urban areas (one group per country) to ensure representation of different country zones. The hypothesis being tested was: "It is more likely that people sending money to rural areas in the home country will be willing to link their remittances with an energy product."
- Education Level: Groups were divided into higher and lower education levels. Since some of the sustainable energy products presented varied in price, it was important to include participants with different education levels as a proxy for income level, based on the assumption that the higher the education level, the higher the income level was likely to be. The higher education levels included: high school, technician and college (finished or unfinished). Lower education levels included: elementary school and junior high.
- Length of Time Sent/Received Money: Groups were also divided into people that had received/sent money for more or less than five years. Some groups included participants with both characteristics. The team was testing two hypotheses here: "The longer that Remitters have been away, the more they want to control the money they send home" and "The longer time that Remitters have been away, the more likely they are to be willing to link their remittances to a sustainable energy product."

In addition, each group included participants with banking knowledge (measured in terms of participants with varied experience in using banks, credit cards and on-line banking) and prepaid-card knowledge (measured in terms of varied experiences in using gift cards, telephone cards or any other type of prepaid cards). Recipient groups included a variety of participants in terms of quality of electric service, measured in terms of people with or without energy problems, such as blackouts; and in terms of people who were and were not connected to the grid. Recipient focus groups always included people who received money from New York.

Finally, groups were conducted in four different languages: English (NY Haitian Remitters); Spanish (NY Dominican Remitters and local people in DR); French and Creole (local people in Haiti).
Socio-demographic Profile of Focus Groups

| Session Number | Country, Location, Date | Participants | Origin | Role | Sex and Age Range | Area | Education Level | Time Money Sent / Received |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ \text { (S1 Haitians NY +-edu) } \end{gathered}$ | Place: Spring Valley, NY Rockland County Date: Sep. 13, 2009 | 12 | Haitians in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | $\begin{aligned} & \text { Mixed } \\ & \text { (+-edu) } \end{aligned}$ | Less and more than 5 years |
| $\stackrel{2}{2}$ (S2 Haitians NY +edu) | Place: Brooklyn, NY Date: Sep.20, 2009 | 11 | Haitians in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | Higher (+edu) | More than 5 years |
| $\stackrel{3}{(\text { S3 Haitians NY +-edu) }}$ | Place: Brooklyn, NY Date: Sep.20, 2009 | 12 | Haitians in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | Mixed <br> (+-edu) | More than 5 years |
| $\begin{gathered} 4 \\ \text { (S4 Dom NY +edu) } \end{gathered}$ | Place: Harlem, NY Date: Sep.15, 2009 | 7 | Dominicans in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | $\begin{aligned} & \text { Higher } \\ & \text { (+edu) } \end{aligned}$ | More than 5 years |
| $\stackrel{5}{(S 5 \text { Dom NY -edu) }}$ | Place: Harlem, NY Date: Sep.19, 2009 | 8 | Dominicans in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | Lower (-edu) | More than 5 years |
| $\begin{gathered} 6 \\ \text { (S6 Dom NY-edu) } \end{gathered}$ | Place: Wash Heights, NY Date:Sep.22, 2009 | 10 | Dominicans in NY | Remitters | Women 18-64 years | Urban and rural Recipients | Lower (-edu) | More than 5 years |
|  |  |  |  |  |  |  |  |  |
| $7$ <br> (S7 Haiti North rural) | Place: Ganthier (North) Date:Oct.10, 2009 | 12 | Haiti | Recipients | Mixed 18-64 years | Rural Haiti | Lower | Less and more than 5 years |
| $8$ <br> (S8 Haiti Centre rural) | Place: Mirebalais (Centre) <br> Date: Oct.12, 2009 | 9 | Haiti | Recipients | Mixed 18-64 years | Rural Haiti | Higher | More than 5 years |
| $9$ <br> (S9 Haiti Centre urban) | Place: Hinche (Centre) <br> Date: Oct.13, 2009 | 9 | Haiti | Recipients | Mixed 18-64 years | Urban Haiti | Mixed | Less and more than 5 years |
| 10 (S10 DR StoDom urban) | Place: Sto. Domingo East Date:Oct.7, 2009 | 8 | Dominican Republic | Recipients | Mixed 35-64 years | Urban DR | Higher | Less and more than 5 years |
| 11 <br> (S11 DR South rural) | Place: Bani (South) Date: Oct.8, 2009 | 9 | Dominican Republic | Recipients | Mixed 18-64 years | Rural DR | Lower | Less and more than 5 years |
| $12$ <br> (S12 DR North rural) | Place: Bonao (North) Date:Oct.9, 2009 Time:3pm | 10 | Dominican Republic | Recipients | Mixed 18-64 years | Rural DR | Mixed | More than 5 years |

## $\checkmark$ Recruiting of Participants

- All sessions were prepared at least one week prior to the focus groups by Arc Finance researchers in New York. Sessions in Haiti and the Dominican Republic included the participation of a local assistant in each country.
- A list of Haitian and Dominican associations in New York was collected and contacts were identified to enable the researchers to invite participants in a personal way.
- In general, people in Haiti and the Dominican Republic were initially reluctant to participate due to the level of mistrust among citizens of both countries. It was important to reassure them that the researcher team had a genuine interest in understanding the energy situation in their country and that the products to be tested were not for sale.
- All focus group sessions took place in meeting rooms that offered a safe and comfortable environment in order to promote an open discussion.


## $\checkmark \quad$ Structure of the Report

In reading the report is it important to understand the following:

- The report reflects the discussions that took place in the focus groups as closely as possible. This means that the quotes contain colloquial language used by participants and should be understood as such.
- The tables are a means to present quotes in an organized way. The narrative text above each of the tables summarizes the general idea of the quotes in the tables, which are literal expressions given by participants. The narrative is written only after the quotes are organized by the researcher under the best possible heading for the collection of quotes.
- In choosing the headings, the researcher is guided by the data presented by the participants, not by her own perceptions. Headings are given to a set of quotes that refer to the same concept. Some tables include positive and negative aspects of that topic which is where the richness of the report lies.
- Each quote is followed by a parenthesis that refers to the specific group from where that quote originated. When amounts are given in local currency (Dominican pesos and Gourdes), the equivalent in US dollars is included next. The exchange rate used for the currency in Haiti is US $\$ 1=42$ gourdes and US\$HT1=5 Gourdes. For Dominican pesos, US\$1=35 pesos.
- The report includes graphs that were drawn from the Basic Information Questionnaires that each participant completed before starting the focus group discussion. They represent the opinions of participants in these focus group sessions, not of the whole population in Haiti or in Dominican Republic.


## MAP AND FOCUS GROUP LOCATIONS IN NEW YORK

A total of six groups were conducted with Remitters in the New York area. Three of them included participants of Haitian origin, and three with Dominicans. This map shows the different locations participants were drawn from. The range of locations is an important dimension in ensuring diversity and a wide range of opinions during the focus group discussions.


## 1. Profile of Participants

The graphs below illustrate four key profile characteristics (gender, age, income and education) of the Haitian and Dominican Remitters that participated in the focus groups.

The first graph shows that the focus groups included both sexes with a balanced number of men and women, with the exception of the last group, which had only Dominican women participants. The age of participants was spread across a broad range, with a majority of people between 26 and 65 years of age.




The graphs on income and education levels demonstrate that Haitian Remitters are better off than Dominican Remitters. While Haitians are fairly evenly divided between those earning US $\$ 1,000$ to US $\$ 4,000$ monthly and those earning more than US $\$ 4,000$ monthly, there are more Dominican participants earning less than US $\$ 1,000$ a month and fewer earning more than US $\$ 4,000$ a month. In terms of education, the trend is similar. Haitian participants have a higher level of education, many with university and graduate degrees. Dominican participants, on the other hand, have lower education levels.



### 1.1 Activities of Participants

In general, Remitters in New York have higher education levels when compared to Recipients in Haiti and the Dominican Republic. This is conclusion is supported by an examination of the types of activities they do to make a living: more Remitters are likely to be technicians and professional people. Many Remitters are also salaried, and often cite their jobs as "supervisor," or "working on security or delivery services;" others are retired and have access to some sources of income. While Recipients were frequently self-employed, this was not a common trait among Remitters.

| Technician | Professional |
| :---: | :---: |
| a) Nurse <br> - 'I am a nurse and I work with mentally disabled people.'(S1 Haitians NY +edu) <br> - 'Care manager, nursing. I help old people.'(S1 Haitians NY +-edu) <br> - 'I'm working at a "Home Banking" union, and also taking care of the elderly.' (S5 Dom NY -edu) <br> - I've been living in NY for 11 years and work in different areas of the health sector.'(S6 Dom NY -edu) <br> b) Secretary <br> - 'I am a secretary at Kombit.'(S1 Haitians NY +-edu) <br> c) Teacher Assistant <br> - 'I work as a teacher's assistant, but I used to work doing physical therapy.'(S5 Dom NY-edu) <br> d) Electrician <br> - 'Electrician.'(S1 Haitians NY +-edu) | a) Manager <br> - 'Director of Kombit (Haitian Federation in NY). Run day to day operations of Kombit.'(S1 Haitians NY +edu) <br> - 'As the Dominican Commissioner for Cultural Affairs in NY. I organize book fairs and conferences, and classical music concerts in Boston and NY. I am 40 years old and have been living in NY for 12 years.'(S4 Dom NY +edu) <br> b) Accountant <br> - 'Accountant. I work for a pharmacy in NY.'(S1 Haitians NY +-edu) <br> c) Finance <br> - 'I am Financial Manager for a credit card company and am getting my Master's degree in Chicago. I was born in NY. My parents arrived in NY 32 years ago.'(S4 Dom NY +edu) |


| Retired | Salaried | Other Activities |
| :---: | :---: | :---: |
| - 'I am retired now but used to work as a health care provider, 55 yrs old.'(S1 Haitians NY +-edu) <br> - 'I am a nurse, retired.'(S1 Haitians NY +-edu) <br> - I am 63 years old and have been living in NY for 45 years. I retired from General Electric after 21 years of working there and now I work parttime doing maintenance in a building.'(S4 Dom NY +edu) <br> - 'I got to NY in 1983. I don't work anymore but I used to clean houses.'(S5 Dom NY edu) <br> - I've been living in NY for 35 years. I'm retired, but I work on social welfare cases, child and adult literacy.'(S5 Dom NY -edu) | a) Delivery service <br> - 'Unload trucks.'(S1 Haitians NY +-edu) <br> - 'Work delivering medical products to hospitals.'(S1 Haitians NY +-edu) <br> - 'Delivery of animal food.'(S1 Haitians NY +-edu) 'Work as a bus driver. I am also a radio talk show host.'(S1 Haitians NY +-edu) <br> b) Supervisor <br> - 'I am 27 years old and I am a supervisor at a drugstore.'(S4 Dom NY +edu) <br> c) Security <br> - 'I arrived in NY in 1962 and I have a job in security in a building.'(S5 Dom NY -edu) <br> d) Community organizer <br> - 'I came to NY 4 years ago. I'm a community organizer at the Mirabal Sisters Center.'(S5 Dom NY -edu) | a) Student <br> - II study English and have been in NY for 3 months.'(S4 Dom NY +edu) <br> b) Cleaner <br> - 'Work in a clinic and in private homes cleaning.'(S1 Haitians NY +-edu) <br> c) Baby Sitter <br> - I am a baby-sitter. Normally I take care of 12 children, but today only 4.'(S5 Dom NY -edu) <br> d) Housewife <br> - I've been in NY for 20 years and I am a housewife.'(S5 Dom NY edu) |

### 1.2 Time Remitter Has Been Sending Money and Number of People to Whom Remitter Sends Money

A majority of the Haitian and Dominican participants in New York arrived directly from their countries of birth and now live in New York. They have been sending money home since they left their countries, sometimes for more than thirty years. (See graph: Time Remitter Has Been Sending Money). Some openly explained that the reason for going abroad in the first place was specifically to send money to people back home. In particular, several Dominicans explained that it is "cultural" to go to the United States to study, work hard, save, retire and then go back home to the Dominican Republic.


Remitters explained that they send money to many different types of people - relatives, friends and others - that in total may add up to almost 50 people in a year. They summarized this situation as follows: 'It feels all Haiti depends on me.' 'People in Haiti are not on welfare, they are on us.' They confided that as soon as their telephone in New York rings, it means that there is another need, an emergency, an unpaid bill, a sick person, and therefore money is sent almost right away. Many said that 'all my money is going there.'

For the most part, the families receiving money live primarily in urban areas; however, Remitters indicate that they have friends or family members living in rural areas also. The graph "Residence of Recipients" shows the range of locations where receivers live.

In general, Remitters acknowledge that the needs of their families back home are greater than their own. They are happy to help, but feel that their families have a misconception about their financial situation: 'When we leave the country they think that now we have everything here. My parents thought that I would be given a place to live, food, and everything because I am American, but it's not like that.' They are finding it more difficult to send remittances these days because the situation in New York has become more difficult for them. It was interesting to hear some participants complain about the lack of phone calls from home to check how they are doing in New York. However, they recognize that no matter how bad their situation is in the United States, their families have it worse: 'There is no money there to make a phone call, there is no work and medicine is expensive. They have more needs. Here we are rich because there is more food than we need.' An extreme example of this situation is one participant who said she is living in a shelter with her baby and is still sending money to her family on a monthly basis.

## Residence of Recipients

Where do the family members receiving your money reside in Haiti / Dominican Republic?

| REMITTERS |  |  |
| :---: | :---: | :---: |
| Haitians |  | Dominicans |
| Port-au- Price <br> Bellanse <br> Croix-des-bouquest <br> Cap haitien <br> Aquin <br> Clercine <br> Pointe Huîtres <br> Region PAP <br> Ouanaminthe <br> Dondon <br> Miragoâne <br> Carice | 18 2 1 1 1 1 1 1 1 1 1 | Santo Domingo 13 <br> Santiago 2 <br> San Pedro 2 <br> San Francisco 2 <br> Azua 1 <br> Amina 1 <br> Alida 1 <br> Nagua 1 <br> La Romana 1 <br> Tenares 1 |

The graphs show the opinions of the participants. They are not representative of the total population.

a) I send money to many, many people

- 'It feels all Haiti depends on me.' (S1 Haitians NY +-edu)
- 'People in Haiti are not on welfare, they are on us (the Diaspora).'(S1 Haitians NY +-edu)
- 'I have a big family of about 50 and I help them all.'(S1 Haitians NY +-edu)
- 'I send to my mom, little brothers and friends. A total of 7 people. And I send cargo packages to help the community.'(S1 Haitians NY +-edu).
- 'I send approximately US\$400 a month for 3 or 4 people at a time. Different people, not always the same ones.'(S2 Haitians NY +edu)
- 'I have 23 godchildren. They all expect something. I send money to the school and one of my cousins distributes the money. I send an additional US\$500 in September.'(S2 Haitians NY +edu)
- 'I send US\$100 to US\$300 to more than 10 people.'(S2 Haitians NY +edu)
- 'I send for my family and my organization. I send to about 10 to 15 family members and friends.'(S2 Haitians NY +edu)
- 'To the family who raised me when I was growing up. I send US\$200 to US\$300 a month. I send for 10 to 15 people.'(S2 Haitians NY +edu)
- 'As a single mother I send money to my family not to friends. I send money to 7 members of my family. I send US\$400 for the family.'(S2 Haitians NY +edu)
- 'I have lived in NY for 15 years. I send money to family: uncle, wife, and five children. I have been supporting them for the past 5 years. I send US\$250 a month for a family of 6 people.'(S3 Haitians NY +-edu)
- 'I send to many people: US\$150 to my sister and for my expenses. I also send on special occasions, Christmas, Easter, for 10 to 12 people. I send US\$500 for everyone; about US\$50 to US\$70 per person ... it depends.'(S5 Dom NY -edu)
- 'I send money to my father, to two cousins, my sister-in-law, my grandfather. In total I send money to 5 people, separately, and not every month. I send US\$50 up to US\$200 depending on what they need.'(S6 Dom $N Y$-edu)
- 'I send to a lot of people because I have 4 siblings and nieces and nephews. I don't always send money, but on birthdays I do send more. I also send boxes of food gifts, and clothes for my nieces and nephews.'(S6 Dom NY -edu)
b) The telephone rings... and we send money
- 'We don't send to one person directly. Sometimes we send to one member of the family, sometimes to others. They call for help at different times.'(S1 Haitians NY +-edu)
- 'I cannot count how many people depend on me. When they call for money, we send. Sometimes they ask for US\$100, sometimes US\$1000, it all depends.' (S1 Haitians NY +-edu)
- 'I also send to friends, relatives and godchildren, to about 15 to 20 people in total. I send every 2 or 3 months. On average it's about US\$300 ... when the phone rings.'(S2 Haitians NY +edu)
- 'They call when someone is sick or someone dies. Then I send US\$50 or US\$100 at a time to help out.'(S2 Haitians NY +edu)
- 'I send like US\$700 per year to my childhood friends because they have it rough and call for money.'(S4 Dom $N Y+e d u)$
- 'I send my money to my sister. She calls me and says, "I don't have enough for the electric bill... help me pay it." I send her US\$100 per month, well I used to, not anymore. The economy is very bad.' (S5 Dom NY edu)
- 'When they call you it's because they have a problem so you have to find money any way you can. It's an emergency. I used to only have a 17-year-old boy but now I have a seven-month-old baby. It's hard.'(S6 Dom $N Y$-edu)
- 'In Santo Domingo, there are no special occasions. It's when the phone rings because everyone has problems ... they're sick ... I'm constantly sending money to everybody.'(S6 Dom NY -edu)
- 'It's difficult over there so the phone is always ringing, but you can't always answer it. They never call to ask how I am; they only call to ask for something.'(S6 Dom NY -edu)
c) All my money is going there
- 'My allowance money or spending money is all going there.'(S2 Haitians NY +edu)
- I'm sending all the time. I have many, maybe 18 people. They call every night When the phone rings, it is one of them. Hey! They have to wait for the pay day.'(S2 Haitians NY +edu)
- 'From time to time US\$50 or so, if I have an extra US\$25 I will send it again.'(S2 Haitians NY +edu)
- I send money to my grandmother, cousins and aunts since I was 16 years old. Every month I send money to my grandmother and to two families in the DR. Before, I didn't have any money, but now that I am paid well I send money to everybody and am left with nothing.'(S4 Dom NY +edu)
- 'It's a lot! You're sending all your money. It's hard here. I used to send every month or every week but now I don't.'(S6 Dom NY -edu)
- I used to send more because I had more family and I worked more, but now I'm at a shelter. I don't have a job anymore, but I send anyway.'(S6 Dom NY-edu)


### 1.3 Amount and Frequency of Money Sent

Remitters from New York are not people who have large incomes, and yet they all still send money to Haiti and the Dominican Republic to help support their close and extended families, friends, and in some cases their local associations, the church or a soccer team. The amounts sent are sometimes very large, such as US\$300 on a weekly basis, but sometimes smaller quantities are sent to several people on a more frequent basis. A surprisingly large number of people are sending significant funds for special events, such as funerals, weddings and birthdays.

Most people are sending remittances on a monthly basis (information that is confirmed on the graph), with amounts varying from less than US $\$ 100$ to US\$650. The graph illustrates that average amounts sent by participants in each of the groups ranges from US\$145 to US\$365 monthly.

## Amount and Frequency of Money Sent



A smaller number of participants sends more than once a month; some on a weekly basis with amounts that vary from US $\$ 20$ to US $\$ 300$, and others every two weeks with amounts varying between US $\$ 70$ to US\$300. Another relatively common arrangement is to send remittances every two to three months, in the amounts of US\$40 to US\$300. However, there is consensus that even though they send money to their families at an established frequency, there are often other pressing family needs. As they said, 'any time the phone rings' it is a family member calling to ask for additional money.

a) Less than US\$100 monthly

- 'On average US\$100 a month, between my daughter and my nephew, I lost count but, it's between US\$50 to US\$100 a month.'(S1 Haitians NY +-edu)
- 'I send money to Haiti for 4 cousins. I send money each month, at least US\$100 to each cousin.' (S3 Haitians NY +-edu)
- 'When I have work, I send US\$100 or US\$50, or whatever I can. I always send my mother US\$100 each month. My mother used to live with me in NY but she went back to the Dominican Republic because she didn't want to live here.'(S5 Dom NY -edu)
- I I send my mother US\$75 per month or every two weeks. I have been sending since I was 18, to my mother, three siblings, uncle, and sister. Five people in all.'(S6 Dom NY -edu)
- 'I arrived in 1996. I have been here for 13 years. I used to send money to my mother, but since she died I only send money to my siblings. I have a sister, and I send her US\$75 per month.'(S6 Dom NY -edu)
b) From US $\mathbf{\$ 1 0 0}$ to US $\mathbf{\$ 2 0 0}$ monthly
- 'I send my mother US\$100 every month.'(S2 Haitians NY +edu)
- 'I don't send a lot but I send constantly. On average I send US\$200 a month.'(S2 Haitians NY +edu)
- 'On average I send US\$200 a month, more or less, to family and friends. Lately, I have also been sending money to the DR because I have a friend who moved there.'(S2 Haitians NY +edu)
- I send US\$175 per month to my mother and son and for my mother's medicine and for food. I have been living in NY for 20 years.'(S4 Dom NY +edu)
- 'My family in the DR is better off than me but I send US\$200 every month just to my daughter.'(S4 Dom NY +edu)
- I send US\$150 each month to a brother.' (S5 Dom NY -edu)
- $\quad$ I send my mother US\$100 to 200 per month depending on how much she needs.'(S6 Dom NY -edu)
c) From US\$200 to US\$650 monthly
- 'I sent US\$200/300 monthly - or every 2 or 3 months. They use the money for food, to fix up their house, and for their daily needs.'(S3 Haitians NY +-edu)
- II send US\$400 per month to a niece and to my grandmother who is 100 years old, for household expenses. If she doesn't receive the money, she calls to tell me she has to go to the doctor.'(S4 Dom NY +edu)
- 'My mother is very independent and only asks when money is very tight, like when the apartment that she has and rents needs to be fixed. The most I send is US\$300 per month, as she has an income from the two apartments she rents.'(S4 Dom NY +edu)
d) 'I send US\$500 per month to my daughter's father. I send my father US\$150 per month and US\$150 to my sisters.'(S5 Dom NY -edu)



### 1.4 Items Sent Other Than Money

Remitters also support their families by sending boxes with food, clothes and shoes, medical equipment, medicines, housewares, gifts, items to sell and other articles such as toothpaste. This was more common among Dominican participants living in New York. Boxes are filled with goods given to them for free by food programs in New York and by local churches. They also collect used items from neighbors and buy other articles at highly discounted prices. The frequency of sending boxes could be as often as every two months. Although they realize that the cost of shipping is higher than the value of the goods being sent, they like the idea of sending gifts that they feel are important for their families back at home: 'If you start calculating what you pay for the boxes, it's no good because you spend US\$500 just to send it, plus what you bought to send. But there are a lot of sales here or we send things that are given to us.'

| Send Articles |  |
| :---: | :---: |
|  | Clothes for children |
|  | 'To help children in Haiti by buying cloches.'(S1 Haitians NY +-edu) |
|  | 'I have cousins who bother me for stuff. My old clothes and other stuff.'(S2 Haitians NY +edu) |
|  | 'Because it's easy, I send a dress.'(S6 Dom NY -edu) |
|  | 'I send new things like clothes, toothpaste. I fill the box to the top so that more fits, but it does cost me a lot.'(S6 Dom NY -edu) |
|  | Medical equipment and medicines |
|  | 'I send clothes, medical equipment, and money. I spend about US\$3000 | on equipment but I also send gifts of US\$50 or US\$100 and when I go to the DR I take many gifts.'(S4 Dom NY +edu)

- 'Every month, I send my grandfather US\$50 because of his illness because he needs to pay for the doctor. I also send medicine and clothes in boxes. I send boxes twice a year.'(S6 Dom NY -edu)
c) Gifts
- 'I send boxes twice a year.'(S6 Dom NY-edu)
- 'I send one box every two months.'(S6 Dom NY -edu)
- 'My mother was here in NY. I also send on special occasions, but we send gifts, not cash. I send them a box with gifts, and I send it through a door-to-door agency.'(S6 Dom NY-edu)
- 'I have many friends with families over there so I make boxes three times per year. Neighbors give me things and I send them for my family. Sending boxes costs me US\$85 to US\$100.' (S6 Dom NY -edu)
- 'I send things that I buy on sale and things that people give me. The items in the box are worth US\$600-\$800.'(S6 Dom NY -edu)


## Send Food

a) Food because it is cheaper in NY

- 'Because food is cheaper here.'(S6 Dom NY -edu)
- 'If I'm going to travel to Santo Domingo to visit my family, I send a box ahead so as not to carry it and to avoid paying for it on the plane. When I go with my girls, I send food for my daughters, like cereal, and it arrives before I do.' (S6 Dom NY-edu)


## b) Food because it is donated

- 'I send 4 boxes with clothes and 3 boxes of food, because in Washington Heights there are places that give free food and I send it to my family.'(S6 Dom NY -edu)
- 'Some organizations give food. I have used them.'(S6 Dom NY-edu)
- I send 2 boxes per month. It's not that I'm nice, but if they give me things, I send them. Most people do that. You don't send boxes filled with things you buy. We send what we are given. I save things I'm going to send in a corner, and when it adds up, I send the boxes.'(S6 Dom NY-edu)
- 'Washington Heights is a place with a lot of poverty and they give us things for free, but when they realize that we are sending them, they'll take them away. These centers are on 114th, 110th, and 150th streets, and there are some churches where they give food. They are Baptist churches and the pastor gives us donations.' (S6 Dom NY-edu)
a) Negative: Sending boxes is expensive
- 'One box of food costs US\$70 to send. There were deals where you could send 3 boxes for US\$200, but you had to fill the three boxes, and that's expensive.'(S6 Dom NY -edu)
- 'I have paid US\$800. But you can send 3 boxes for US\$200 because there is competition between the agencies. I only send boxes at Christmas.'(S6 Dom NY -edu)
- 'What you pay (cost of shipping) to send boxes is extra money on top of what we send.'(S6 Dom NY -edu)
- 'Once I sent a suit that cost US\$100, but I had to pay US\$ 75 for the box. To send a freezer, it costs US\$175 (shipping).'(S6 Dom NY -edu)


### 1.5 Use of the Money Sent

Remitters always mention food, school, clothing, medicines and bills as the first uses of the money sent (tables marked in green). These are recognized as daily expenses and many Remitters do not express any desire to control how the money is spent. They believe, in general, that their families and relatives make spending decisions based on their day-to-day needs.

However, it became apparent that a substantial number of Remitters request that the remittances (or a portion of the remittances) be designated for a particular use, such as paying for house utilities (electricity, gas, telephone), to invest in a business or to solve an emergency or other predicament. Money is very often sent for very specific expenses and with quite clear instructions from the Remitter's side on how to spend it (tables marked in orange). Some Remitters invest in retirement plans, (like building a house or buying land), others send money to pay for rent or a mortgage, and donate to particular organizations to build schools, to provide medical equipment to hospitals, to churches, for children's welfare and emergency relief organizations during catastrophes. In addition, special occasions, like Christmas, Mother's Day, birthdates, funerals, weddings, are often the reason to send an additional remittance.

|  | Daily Expenses |
| :---: | :---: |
| a) Daily expenses: food, school, clothing, medicines, bills, debts |  |
| - 'I help family members at least once a month. Other friends twice or three times a year for sickness or to help friends with school.'(S1 |  |
|  | 'It's for school and food.'(S1 Haitians NY +-edu) |
|  | 'I help friends buy food.'(S2 Haitians NY +edu) |
|  | 'For school, daily expenses like food and clothing.'(S2 Haitians NY +edu) |
|  | 'I also send money to the DR to pay for my son's medical school. We need to pay in dollars because Dominicans don't want to take pesos. I need to pay for food, housing, school and a car! It is really expensive.'(S2 Haitians NY +edu) |
|  | 'My son is a big eater so US\$50 goes quick.'(S2 Haitians NY +edu) |
|  | 'For food and to pay money they owe.'(S5 Dom NY -edu) |
|  | 'I send my mother and my sister US\$200 on a regular basis, for the house.'(S5 Dom NY -edu) |
|  | 'Personal expenses: food, electricity, phone.'(S5 Dom NY -edu) |
|  | 'I send my mother money regularly and it is for her daily expenses.'(S6 Dom NY -edu) |
|  | 'I send for the children's school, for the phone bill and when they get in trouble. They use it for everything, like when they buy things with credit and they have monthly payments at the household appliance stores.'(S6 Dom NY -edu) |


| House Utilities: Gas, Electricity, Phone | To Invest in a Business | Emergencies / Troubles |
| :---: | :---: | :---: |
| - 'Maintaining house utilities (to pay bills). I have the intention to come back soon (to Haiti).'(S1 Haitians NY +-edu) <br> - 'For utility bills.'(S2 Haitians NY +edu) <br> - 'I have been in NY for 18 years and I send US\$100 per month only to my mother. She pays the electric and phone bills, and other expenses.'(S6 Dom NY -edu) | - 'For little businesses: like selling candy and other little business.'(S2 Haitians NY +edu) <br> $n$ building a house. My sister invests my money.'(S2 Haitians NY +edu) <br> - 'As a Haitian-American, if you're sending money to open a business you are creating jobs and opportunities in Haiti.'(S2 Haitians $N Y$ +edu) | - I send money to my mother, grandmother, and to the woman who takes care of my mother. I only send money to my mother when she needs it or when she has trouble.'(S4 Dom NY +edu) <br> - 'I have siblings here and when there's a problem, we all pitch in, about US\$50 or US\$100. Things like when the car motor needs repairs, or to fix a tire, or when something happens to the house and it needs fixing.'(S6 Dom NY-edu) |


| a) | For Christmas |
| :--- | :--- |
| $-\quad$ 'Three times a year but big amounts for Christmas.'(S1 Haitians NY +- |  |

- 'Three times a year but big amounts for Christmas.'(S1 Haitians NY +edu)
- 'We also send for Christmas, weddings, basically for special occasions.'(S1 Haitians NY +-edu)
- '\$500 for my sister for Christmas.' (S1 Haitians NY +-edu)
- 'At Christmas we send a lot of money. We have so many people to send to.'(S3 Haitians NY +-edu)
- 'For Christmas, we send US\$400-\$500 to all the people. That's typical.'(S3 Haitians NY +-edu)
- 'Of course, I send money to my mother and to my brother at Christmas. On special occasions I send US\$50 for the two of them.'(S6 Dom NY-edu)
- 'I send about US\$50 to US\$100 per month, plus US\$200 at Christmas, plus three or more times per year on special occasions.'(S6 Dom NYedu)


## b) Weddings and funerals

- 'I send twice a month and more for special occasions like marriage funeral and school. '(S1 Haitians NY +-edu)
- 'I also send on special occasions: funerals, weddings. Approximately US\$1500 for those occasions.' (S3 Haitians NY +-edu)


## c) On birthdays

- I send money to friends on birthdays, to about 5 people, I send US\$100 or US\$50 on those special occasions.'(S5 Dom NY -edu)
- 'I send US\$50 to my aunts on birthdays, and US\$100 for Christmas.'(S5 Dom NY -edu)
- 'If it's my nanny's birthday I send more to my mother so that she can buy her a gift. On these special occasions I send an extra US\$50.' (S6 Dom NY -edu)


## d) Mother's Day

- 'On Mother's Day, to my grandmothers US\$20 and also for Christmas.' (S5 Dom NY-edu)
- 'On holidays I send money to 9 people. On Mother's Day I send US\$200 on top of what I send monthly. I send money to my siblings on birthdays or for emergencies. I would send them US $\$ 300$ in case of an emergency, about twice a year.'(S6 Dom NY -edu)
- 'I send US\$200 for two women on Mother's Day and US\$200 for everyone at Christmas. I don't send anything regularly, just to my mother before she died.'(S6 Dom NY -edu)


## e) Graduation

- 'I send money on 15th birthdays, for baptisms and weddings. I still can, but not as much. When my neighbor graduated I sent him a suit for his graduation.'(S5 Dom NY -edu)


Build a House or School, Buy Land, Pay Rent or Mortgage

## a) To build a retirement home

- 'I have my own house in Haiti with family members living in it. I'm building a house because my step father does not want to be in NY anymore.'(S2 Haitians NY +edu)
- 'I have land so I have to pay for that land. We are doing this for the future so that when we are not working any more we can live there.'(S2 Haitians NY +edu)
- 'Been here 34 years. (I came to NY) right out of high school. Only recently I sent money to my mother to build her retirement house.'(S3 Haitians NY +-edu)
- 'My mother retired and went back to the DR when I turned 18 and since then I send her money. Dominicans buy houses when they retire at 40 because the only culture they have is the passion of returning to their country.'(S4 Dom NY +edu)


## b) To build a school

- 'We are building a school, with the help of my mom and Father. In the past, we did transfer a lot of money: approximately US\$290,000 for the construction of the academy. We pay staff also by transfer.'(S2 Haitians NY +edu)
- 'I have a house that I want to fix up and turn into a school.'(S4 Dom NY +edu)


## c) To buy land

- 'I send money to buy land and send money to construct home and for additional assistance.'(S1 Haitians NY +-edu)


## d) Pay rent

- 'I also send 5 to 6 times a year. I send for a cousin's rent once a year, and money every 2 months (\$200-\$300).'(S1 Haitians NY +-edu)
- '\$500-\$1000 to pay rent.'(S1 Haitians NY +-edu)


## e) To pay for the mortgage

- II send US\$400 every month to pay for the mortgage of my two houses in Santo Domingo.'(S4 Dom NY +edu)
- 'My family lives here but I send for the mortgage, which I have been paying for 10 years, and have 7 years left to pay.'(S4 Dom $N Y+e d u)$
a) Associations and programs in general
- I send money not to a specific person but I donate to associations at least 5 times a year on average.'(S1 Haitians NY +-edu)
- 'My family was already here when I got here so I didn't have to send money. But 5 years ago I joined an organization and now I send US\$400 a month to help out.'(S2 Haitians NY +edu)
- 'We send funds for family and friends and for a not for profit organization. We send US\$2500 for the project up to 4 times a year.'(S2 Haitians NY +edu)
- 'Every year I send US\$5,000 in one lump sum to organizations or to my family.'(S2 Haitians NY +edu)
- 'We did an irrigation program and we send to pay for teachers. We send a lot of money.' $(S 2$ Haitians $N Y+e d u$ )
- 'Every year I send US\$3,000 or US\$5,000 in one lump sum to organizations.'(S2 Haitians NY +edu)
b) Natural disasters
- I'm helping to restore and rebuild my town because it was destroyed by the last hurricane. I give US $\$ 300$ for rebuilding - directly to the organization.'(S2 Haitians NY +edu)
- 'I don't send to individuals. I send when there is an emergency like cyclones. That is how I help Haiti. We bought medical supplies and we sent them. We spend US\$1000. I'm an entrepreneur... so it's a way of giving back to the community.'(S3 Haitians NY +-edu)


## c) Church

- 'I just sent US\$2600 to the Catholic Church.'(S2 Haitians NY +edu)
- 'I don't have close relatives but I give to friends who need help. Also, I give to churches or to organizations.'(S3 Haitians NY +-edu)
d) Soccer team
- I send for the soccer team to buy equipment US\$40 to US\$100 every 2-3 months.' (S1 Haitians NY +-edu)
e) Children's welfare
- 'I send 5 times a year for children. '(S1 Haitians NY +-edu)
- 'Right now I send to World Vision, Children's Adoption. I send money directly from my checking account.'(S3 Haitians $N Y$ +-edu)


## 2. Ways of Sending Money

Haitian and Dominican participants in New York have a long tradition of sending remittances. They use a number of methods, like Money Transfer Agencies (MTI), person-to-person delivery, microfinance institutions, as well as bank and Internet transfers. The most preferred method to send money is the transfer agencies. Some Remitters shop around and end up using the same MTI for years. In general, these are highly specialized and savvy customers. The method of transferring money is a decision that depends primarily on the Remitter.


The most valued attributes by Remitters when choosing a transfer agency are: 1) Proximity, in terms of branches conveniently located in New York, and closeness to the Recipients' address. 2) Cost for sending US\$100, whether it is US\$4, US\$5, US\$9 or a flat fee of US\$10, regardless of the amount; also, the fee for amounts higher than US\$1,000. 3) Reliability and safety to ensure that the money gets there, especially in cases of emergencies. 5) Home delivery of money sent, as it implies convenience for family members, savings because there is no transportation cost, and security as it can be dangerous to pick up money at branches. 6) Good customer service, like keeping records of money sent and family information in a database, as well as getting points or a free pre-paid calling card to let their families know that the money was already sent. 7) Currency the money is delivered in, as they know that the agency can make a good deal with the exchange rates when receiving dollars and then delivering money in local currencies:

- 'Security because I know that money will get there.'(S1 Haitians NY +-edu)
- 'The closeness to my home.'(S1 Haitians NY +-edu)
- 'CAM, Western Union or with people traveling, depending on the convenience.'(S1 Haitians NY +-edu)
- 'I use Western Union, CAM...It depends on who I'm sending the money to. What is in proximity to me and to the receivers as well.'(S2 Haitians NY +edu)
- 'Because of suspicions about money laundering, we have to use many ways to send large amounts. We have to split it.'(S2 Haitians NY +edu)
- 'You go to the one that's closest.'(S6 Dom NY -edu)

When asked about a better way of transferring their money to their countries, Remitters answered that "we are happy with the service." Some Haitians in New York mentioned that the single thing that they would change is to have the MTIs share their profit with their country.

### 2.1 Evaluation of Money Transfer Agencies

- Western Union: The most appreciated characteristics of Western Union are that it has branches in many locations, that money is delivered safely and quickly - without major paperwork and that it usually arrives within minutes of being sent, that they reward loyalty by giving phone cards and points, that they call the receiver when the money arrives, and that it is reliable in times of emergencies. However, New York participants from Haiti and the Dominican Republic agree that Western Union is very expensive when compared to other agencies because the cost of sending increases substantially with higher amounts. They dislike that there is no home delivery, so people can get robbed when picking up the money, even though they do not have to travel too far to get to the closest branch. Some Remitters noted that there were rumors that Western Union was sued because of not delivering the full amounts being sent. Overall, Western Union received a higher review when compared to Moneygram.
- Moneygram: People like that Moneygram charges a flat rate regardless of the amount, as long as it is less than US $\$ 1,000$. Also, they believe that it is safe and convenient. However, it seems that it is used less than Western Union because it takes longer and it is more complicated to receive money with Moneygram as opposed to the fast service of other agencies. Some New York participants from Haiti really dislike Moneygram.

| Western Union |
| :--- |
| Positives |
| a) It is convenient because they are everywhere |
| $-\quad$ 'To send to rural areas I prefer to send it with Western Union because |
| they are everywhere and they have a fixed rate.'(S2 Haitians NY | they are everywhere and they have a fixed rate.'(S2 Haitians NY +edu)

- 'Western Union is close, convenient and quick.'(S1 Haitians NY +-edu)
- 'I use Western Union because it's more convenient because they are all over the place. I don't have access to other Haitian transfer companies.'(S3 Haitians NY +-edu)
- 'I send dollars through Western Union.'(S4 Dom NY +edu)


## b) It is very fast and safe

- 'It charges more but it is reliable and convenient. WU is anywhere.. no long waits.'(S1 Haitians NY +-edu)
- 'My family lives close to WU (in Haiti). They don't have to wait too long to get their money.'(S1 Haitians NY +-edu)
- 'All you have to do is say your name to pick up the money. You don't have to deal with identification cards. You can pick the money up in less than an hour, sometimes in 4 minutes.'(S2 Haitians NY +edu)
- 'Western Union is the best because I know that it gets there.'(S6 Dom $N Y$-edu)
c) Good client service with gifts: they give points and a 5 minute calling card
- 'I use it because they are everywhere. They sent me US\$75 as a gift because I send lots of money. You also get points for using them.'(S2 Haitians NY +edu)
- 'It's expensive, but Western Union is reliable and it offers good service. They also give you a 5-minute card to call for free to tell people that money is there. It's a matter of choice plus you get to talk to the person you are sending money to and listen to their voice.'(S2 Haitians NY +edu)


## Negatives

a) It is expensive

- 'Western Union will charge a larger amount as the amount being sent gets larger.'(S1 Haitians NY +-edu)
- 'Western Union is the best, but is expensive.'(S1 Haitians NY +-edu)
- 'Western Union is killing. They had a good deal for months.'(S2 Haitians NY +edu)
- 'Western Union, but it costs a little more.'(S4 Dom NY +edu)
- 'Western Union is the most expensive, it's an octopus. I sent US\$1500 and they charged me US\$110.'(S5 Dom NY-edu)
- 'I don't like Western Union because it's very expensive. They can charge up to US\$100 to send US\$700. Others like Nacional y Quisqueyana charge 3\%.' (S6 Dom NY -edu)


## b) No home delivery

- 'If we send via Western Union, they have to pick it up at a Western Union office. They don't deliver. Nobody wants to leave their house and expose themselves to dangers or robberies.'(S5 Dom NY -edu)


## c) Not trust worthy

- 'But you can send US\$100 and you don't know how much the family receives. Western Union was sued because they weren't giving what was sent.'(S6 Dom NY-edu)

Positives
a) Flat rate regardless of the amount (for less than US\$1,000)

- 'Has flat rate to Haiti: US\$10 for any amount less than US\$1000.'(S1 Haitians NY +-edu)
- 'Moneygram is the cheapest and Unibank - US\$10 for each US\$1,000 sent.' (S1 Haitians NY +-edu)
- 'Moneygram, because my first experience with them was very simple. It was really cheap compared to others. For US\$100 you pay US\$10. You also pay US\$10 if you send up to US\$1000.'(S2 Haitians NY +edu)
- 'With Moneygram I can send US\$1000 for US\$9. US\$2000 for US\$29 ...that's not bad.'(S2 Haitians NY +edu)
b) It is convenient
- 'Moneygram works with Fonkoze.' (S1 Haitians NY +-edu)
- 'I used Western Union, but no more. I now send it only through Moneygram to Santo Domingo and Haiti.'(S2 Haitians NY +edu)
- I send through Moneygram and through offices that have connections with Banco Popular.'(S4 Dom NY +edu)
c) It is safe
- 'If you use Moneygram, people can't take the money (steal it).' (S1 Haitians NY +-edu)
- 'If I send US\$4000, I don't send the full amount. I have to send it in 2 or 3 transactions. The point is that you can send it all if you use Moneygram because it is less expensive and you get it there cheaper and safer.' (S2 Haitians NY +edu)


## Negatives

a) Too expensive

- 'It's too expensive. Sometimes I send US\$400 and they charge US\$40 (it's about 10\%).'(S3 Haitians NY +-edu)
- 'I don't trust them.'(S3 Haitians NY +-edu)
b) Takes a long time and is complicated
- 'We don't use Moneygram'(S1 Haitians NY +-edu)
- 'With Western Union you get it right away, same with CAM. Not with Moneygram. With them it takes too long and is too complicated.'(S3 Haitians NY +-edu)
- CAM: This agency is highly esteemed among Haitian Remitters living in New York. CAM provides a home delivery service for money sent and Recipients feel comfortable because it is "Creole." People identify more with this agency, not only because employees speak Creole, but also because family members can get the money easily, faster and safer. They recognize that it is expensive because fees are higher than with other agencies ( $\$ 9$ for US $\$ 100$ sent) and fees increase with larger amounts. Nevertheless, some clients are so loyal to CAM that they can overlook this.
- Fonkoze: Fonkoze is less well known than CAM, but has a loyal following among some Haitian Remitters. They like that Fonkoze is less expensive, even when sending large amounts of money. In fact, there were participants who had changed from another agency to Fonkoze precisely because it is cheaper, even in rural areas. In addition, others like its good customer service - for example Remitters receive a confirmation that the order was sent. They also like that it is easy to access because of the broad branch network. The main criticism is that it is difficult to get an account with Fonkoze.


Other transfer agencies used by Haitian participants in New York are Unitransfer (the transfer agency of a large commercial bank in Haiti, Unibank, with loyal clients that mentioned that this one is less costly than Western Union); Speedy (less popular, but those who transfer there like the personal relationship with family members in Haiti); and Bravo (which charges a flat fee of US\$10).

## Other MTIs Used by Haitians in New York

## Unitransfer: Costs less than Western Union

- 'I go to UniTransfer in NY and they can get it to Haiti. It cost less than to send it by Western Union.'(S2 Haitians NY +edu)

Speedy: They know my family in Haiti

- 'I have been sending money for the past 5 years. I use Speedy in Spring Valley. They charge 9\%, it's high. My family knows the person (at Speedy) and they feel they can trust them. That's why I used them.'(S3 Haitians NY +-edu)

Dominicans in New York referred widely to Quisqueyana and to a lesser extent La Nacional. There were plenty of other agencies mentioned, revealing the large and competitive market in this industry. These are Dollar Envio (which received positive comments because they deliver the money in dollars), Mi Tierra (positive that they charge US\$4 for sending US\$100 and also give a phone card), Valdez Enterprise, Pronto Envio, Fernandez Envio and Daisy Travel.

- Quisqueyana: Among Dominicans in New York, Quisqueyana seems to be the agency with the best reputation. It has been in the business for many years and offers good customer service; it also gives a phone card to clients as a reward for using the service. Remitters value that money is delivered punctually soon after it has been sent. The money gets to Santo Domingo in only 30 minutes and is delivered to the door (though it can take up to half a day for rural deliveries). Even if it does not have so many branches, participants like that fees are lower when compared to others (Western Union); Quisqueyana charges US\$5 for sending US\$100.
- La Nacional: Dominicans in New York like that La Nacional charges US\$5 for sending US\$100 (less than others). However, they are aware that this agency makes money on the exchange rate because they deliver in local currency.
Other MTIs Used by Dominicans in New York
Quisqueyana
a) Good client service: years in business, give a phone card, home delivery is punctual and fast
- 'In 23 years, Quisqueyana agency hasn't changed owners. They haven't charged me in all the years l've used them and they give me a
phone card.' (S5 Dom NY -edu)
- 'Honesty and punctuality. When they say they'll be there in 30 minutes, they're there and they home deliver.'(S5 Dom NY -edu)
b) Do not have many branches, but they charge US\$5 for sending US\$100
- 'With Quisqueyana, it takes half an hour in the city. Another option is to go by the office to pick up the money or they can deliver it to
the home. In the countryside it takes half a day or a day to get there.'(S5 Dom NY -edu)
- 'If it's an emergency, I send via Western Union but they charge US\$8 for US\$100. Quisqueyana charges US\$5 for US\$100.'(S5 Dom NY -
edu)
La Nacional
a) Costs US\$5 for sending US\$100 (less than others)
- 'Nacional costs US\$5 if I send US\$100, and it arrives in one hour.'(S4 Dom NY +edu)
- 'La Nacional is the most famous.'(S6 Dom NY -edu)
b) Make money with the exchange rate because they deliver in local currency
- 'They exchange dollars for pesos but the agency charges a lower exchange rate. I ask them to deliver dollars to my family.'(S4 Dom NY
+edu)
- 'I send dollars and the family receives pesos delivered to their home.'(S4 Dom NY +edu)
Dollar Envio: I send dollars and family receives dollars. If family wants pesos, the MTI gains with the exchange rate
- 'With Dollar I send dollars and they receive dollars. For US\$400 they charge me US\$8 and it arrives in 1 hour. They deliver the money to
their home in Nagua, a small town. That means the family doesn't have to use transportation to go pick it up.'(S6 Dom NY -edu)

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- 'I've never had problems. When I send dollars, they change it to pesos for free. Dollar lets you send US$100 for US$5.'(S6 Dom NY -edu)
_ 'Yes, but Dollar makes money because of the exchange rate.'(S6 Dom NY -edu)
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## Mi Tierra: Costs US\$4 for sending US\$100 (even less than others) and give a phone card

- 'My sister has an agency called Mi Tierra and charges US\$4 for every US\$100 .'(S4 Dom NY +edu)
- 'Mi Tierra, the agency that I use, has a card with my family's information on it. I swipe the card and my family's names and information appear. I let them know the money is coming because the transfer company gives me a phone card.'(S6 Dom NY -edu)

Valdez Enterprise: 'Quisqueyana gives the money in pesos, but with Valdez Enterprise I send dollars and my family receives dollars.'(S5 Dom NY -edu)
Pronto Envio: 'Pronto Envio delivers it to your home, but not until the next day.(S4 Dom NY +edu)
Fernandez Envio: 'With Fernandez Envio you can send up to US\$5000 for US\$2. They get it in pesos and you get a phone card.'(S6 Dom NYedu)

- Person to Person. Participants said that this is the ideal way of sending large sums (thousands of dollars) to families and relatives, especially among Haitian Remitters. Otherwise, they said, 'the fees are outrageous.' They ask friends or family members they trust to hand carry the money in order to save paying fees; they do not pay the messenger, but might reciprocate the favor at a later date. Some of the messengers complained that because they were carrying so much cash they ended up being solicited for additional money from their own pocket when visiting their home countries: 'I spend up to US\$3000 in a week giving to lots of relatives...I give US\$100 here another US\$200 there.' The major downside however, especially among Dominican Remitters, is that travelers run the risk of getting robbed when getting to the island; everybody knows that they carry cash



## Person to Person

- 'Things are tough in the Dominican Republic. I traveled to see my mother when she was sick, but when I got there they took everything I
had. They stole my purse with the cell phone, passport, and money. In 22 years that had never happened to me.' (S5 Dom NY -edu)


### 2.2 Evaluation of Banks in the USA

The level of financial integration is surprisingly high, even among the poorer participants in New York. For example, a large majority of the Haitian participants have a bank account in New York and have access to credit cards. However, while a majority of Dominican participants have bank accounts, they showed less familiarity with credit cards, perhaps because their levels of education and income are lower than the Haitian groups.


Even though banks in the United States receive a better evaluation than banks in Haiti or the Dominican Republic, it is important to mention that general trust of banks is low among Remitters. Among the positive aspects attributed to banks in the US, the most important is that Remitters believe their money is safe and guaranteed by the FDIC. Secondly, Remitters feel that they receive good customer service (especially when compared to Dominican banks where people receive attention based on personal contacts). However, the negative aspects attributed to US banks include: limits on withdrawal amounts; additional charges, such as paying for checks or ATM machine usage; challenges in getting a loan (because US banks do not care for "little" people); too much paperwork which wastes time; and finally, that interest on savings is small.


### 2.3 Evaluation of Banks in Haiti and the Dominican Republic

Few New York Remitters (either Haitian or Dominican) have a bank account in their country of origin. A small segment of these people have inactive bank accounts that were opened for them when they were children and are not currently being used. The majority of participants, however, simply do not have an account.

Many participants said that they do not have accounts because banks are unsafe and unstable as there is no money insurance. Participants of both origins told stories of panic when a bank disappeared (in Haiti) or when money was not available from an account (in the Dominican Republic). Another negative quality of these banks according to Remitters is the additional charge for withdrawing foreign currency (Haiti), and when the amount of money in the account is under the minimum limit. They also said that it is difficult to get access to their own money; that it is expensive to get a loan and that interest on savings is low. A positive aspect valued by Haitian Remitters who have a bank account is that banks in Haiti pay higher interest rates than in the USA. These Remitters believe that the local banks are stable, and that accounts in these banks can be useful to pay for local bills and for business transactions. A portion of participants indicated that they had no opinion about the banks.


### 2.4 Opinion About Transferring Money Through Banks

People who have a bank account in New York rarely transfer money through banks for several reasons. First, it takes too long when compared to the speed of a transfer agency ('When poor people need the money, they need it now'). Second, it is very complicated due to the information banks require. Third, few Remitters and Recipients have bank accounts in their countries of origin so bank-to-bank wires are unpopular and simply unworkable. Fourth, it is too expensive since wire transfers through the bank cost US\$40 or more.

It is important to note that some Haitian Remitters who had used transfer agencies in the past have migrated into transferring money through the banks. They are using the services of Sogebank, Unibank and Fonkoze. These institutions were described as attractive because clients can deposit money directly into their accounts in Haiti.

Citibank was also mentioned as offering a good service because money deposited in NY can be withdrawn in Haiti at no additional cost. Some said that it pays off being a Unibank client (in Haiti) because the fee for transferring money is lower if people use Unitransfer, which is a transfer company that is a subsidiary of Unibank.

Dominican participants in general do not use banks as a transferring mechanism.

| Opinion about Transferring Money through Banks |  |
| :---: | :---: |
| Positive Comments | Negative Comments |
| a) Convenient when transferring a larger amount <br> - 'At first, I used CAM but it was expensive. Then I set up an account with Sogebank and I have an account here ( $N Y$ ). Now I do bank transfers if she needs more than US\$500.'(S3 Haitians NY +-edu) | a) Bank transfers take too long; much faster with MTIs <br> - 'Sogebank takes too long to get your money. Even if you have an account you have to go to the branch and wait in line.'(S1 Haitians NY +-edu) |
| - 'How we transfer money? We use a joint account with an association. But we are trying to have a system where money is handled by less hands.'(S2 Haitians NY +edu) | - 'They asked for 20 days to clear the money before withdrawing it in Haiti with the same bank. Citiba uses. '(S1 Haitians NY +-edu) |
| - 'We don't trust Western Union. We have a checking account at Chase. We send them a check and they get the money that way. We send US\$3500 a year, a fixed amount.'(S2 Haitians NY +edu) | - 'Poor people when they need the money they need it now, not in a bank account which is difficult to access for them. With transfer companies, it is easy: one cell phone notification, you don't need much, just the confirmation |
|  |  |
| - 'I use Citibank and Money Gram. CAM once in a blue moon. It's too much money. The fees are too high with CAM.'(S2 Haitians NY +edu) <br> - 'I do trust them because I wire from one bank to Sogebank. I keep two separate accounts: one in dollars and one in local currency.'(S2 Haitians NY +edu) <br> c) If you have a bank account, the fee is lower | b) Complicated to transfer with banks: too many requirements <br> - 'It's complicated. With banks, you need to get the swift, the route numbers. Not easy. Bank of America asks for too much information: name and bank information for the person back in Haiti". '(S1 Haitians NY +-edu) |
| - 'Sogebank gave me a sheet with an agreement of no fees for transferring with Bank of America. Unibank also has an agreement with a US bank. '(S1 Haitians NY +-edu) | - 'Citibank USA and Citibank Haiti don't work together. The Citibank account in NY wouldn't take money in the Citibank in Haiti. They are different entities.'(S1 Haitia |
| - 'If the family has a bank account, I would prefer to use a bank transfer Haiti. But the receiver should also have a bank account.'(S2 Haitians NY +edu) | - 'My mother sends the money, and she doesn't like to use the bank.'(S4 Dom NY +edu) |
| - I have a bank account at UniBank (in Haiti). They deposit the money directly to the account. They charge $6 \%$ to $8 \%$. When you have a bank account (in UniBank) we only pay a flat US\$6 for transfers. Western Union and CAM charge 9\%.' (S3 Haitians NY +-edu) | c) Few Recipients have bank accounts <br> - 'We did send money from bank to bank. Not frequen because not everyone has an account in Haiti.'(S1 Haitians NY +-edu) |
| d) It's easier: the person in Haiti or DR withdraws directly from the bank account | - 'Poor people want money immediately, and in other to |
| - 'The amount varies because she is building the house. If she has expenses she might go at least once a week and withdraw US\$500 from my account here. She only pays for the foreign exchange when she withdraws from Haiti.'(S3 Haitians NY +-edu) <br> - 'You can now deposit the money in Citibank and you can withdraw your money in a Citibank in Haiti. I do the same with Fonkoze. Sogebank does the same.'(S3 Haitians NY +-edu) | d) Too expensive to do bank transfers <br> - 'I don't use the bank for transfers because banks charge more. Chase to Capital Bank in Haiti charges US\$45 for a transfer. Too much money to send via the bank.' (S1 Haitians NY +-edu) |
| - 'I have my account here in Citibank and I can send money to my account at Banco Popular, but I have to give my family an ATM card so they can withdraw in the DR.'(S4 Dom NY +edu) | - 'In Citibank the wire transfer is a flat US\$40 .'(S2 Haitians $N Y$ +edu) <br> - 'Bank to bank is too expensive. That is why we don't send money via money transfers.'(S3 Haitians NY +-edu) |

### 2.5 Opinion of the Use of the Internet for Money Transfers

While almost $50 \%$ of Remitters had made some transactions using the Internet to purchase tickets or books and to pay for credit cards, the use of the Internet for payments among Haitian and Dominican participants in New York is still low. Those who pay on-line value its convenience and safety, however, those who do not, consider it unsafe and are afraid that their identities might be stolen or simply do not like revealing so much personal information on the web or to their families: 'You have to give your bank code to your family' or 'My account information will show and they (Recipients) are smart and will continue to use it.' Remitters would rather make payments by phone because they feel it is safer. Many indicated their lack of knowledge ('I am old fashioned') and lack of access to the Internet or computers.

## Internet Access: Remitters

Percentage that responded YES


The graphs show the opinions of the participants. They are not representative of the total population.

Only one participant specifically described transferring her remittance via the Internet. For the majority of the Remitters, transferring money themselves via the Internet was unthinkable. Some actually questioned whether this service really exists.

In general, participants prefer to transfer money via the agencies because they believe it is easier, faster, more convenient (i.e., the door-to-door service), and because they do not like trying new ways of sending money. Furthermore, they said that Receivers in Haiti and Dominican Republic are even less familiar with the Internet than themselves and that there is even less access to computers over there.

| Opinion of the Use of Internet for Money Transfers |  |
| :---: | :---: |
| Positive Comments | Negative Comments |
| a) I pay on-line because it is convenient <br> - 'Yes, for the electric company, to pay credit cards, shopping, clothing stores.'(S1 Haitians $N Y$ +-edu) <br> - I pay my credit cards, utilities. I send flowers and everything.'(S2 Haitians NY +edu) <br> - 'I pay bills, my mortgage - I pay on line. I pay for almost everything.'(S2 Haitians NY +edu) <br> - 'I use it a lot and I just started.'(S2 Haitians $N Y$ +edu) <br> - 'It's convenient because I wake up at 11:30 pm and can make the payment that is due tomorrow. It's faster.'(S2 Haitians NY +edu) <br> - 'It's convenient. I do it to get the points. I make payments on the Internet.'(S3 Haitians NY +-edu) <br> b) It is free and safe <br> - 'I use it because it's free.'(S1 Haitians NY +edu) <br> - 'I don't think I will have problems with identify theft.'(S3 Haitians NY +-edu) <br> - 'I go on-line everyday and I would know if someone is using my accounts.'(S3 Haitians NY +-edu) | a) Do not know how internet works <br> - 'No! Will not do it. Right now you have to go to bank. I don't even know how that goes.'(S1 Haitians NY +-edu) <br> - 'I know people who do it, but I don't because it's not easy for me. '(S1 Haitians NY +-edu) <br> - 'I don't know how to do it. Never thought of it. I would need to know how it works.'(S1 Haitians NY +-edu) <br> - 'I don't even know how that would work.'(S1 Haitians NY +-edu) <br> - 'I don't know the process.'(S2 Haitians NY +edu) <br> - 'I make payments by phone and they don't charge. I have paid for medicine, but not over the Internet, by phone.'(S5 Dom NY -edu) <br> b) It is unsafe to pay or transfer money via internet; they can steal my identity <br> - 'I don't use online because I don't like it.'(S1 Haitians NY +-edu) <br> - 'To do so you have to give your bank code to your family.'(S1 Haitians NY +-edu) <br> - 'Even if it works, I wouldn't (transfer money via internet)...my account will show and they are smart and will continue to use it.'(S1 Haitians NY +-edu) <br> - 'I don't trust it because they can steel my identity.'(S2 Haitians NY +edu) <br> - 'I prefer not to do it because of identity theft.'(S3 Haitians NY +-edu) <br> - 'My kids do it. Not me I'm old fashioned.'(S3 Haitians NY +-edu) <br> - 'I don't use the Internet because they steal my identity. I don't like entering all my information.'(S5 Dom NY-edu) |


| Opinion of the Use of Internet for Money Transfers (continued) |  |
| :---: | :---: |
| Positive Comments | Negative Comments |
| c) Only to buy tickets, books | c) Prefer to transfer via MTIs because people get their money faster and it's easier |
| - 'Only if I'm buying a ticket.'(S2 Haitians NY +edu) | - 'When transferring, you can get it delivered at home. CAM gets it directly to the house.'(S1 Haitians NY +-edu) |
| - 'Only tickets for shows and plane tickets. <br> Not for shopping.'(S3 Haitians NY +-edu) | - 'Western Union calls them when the money is there and ready to be picked up. '(S1 Haitians $N Y+-e d u)$ |
| - 'I buy books.'(S3 Haitians NY +-edu | - 'For rich people, it is easy to send. Poor people, when they need it, they need it now. '(S1 Haitians NY +-edu) |
| d) It | - 'It's not easy to send money via the Internet. '(S1 Haitians NY +-edu) |
| - I send money for my daughter in college. I |  |
|  | d) Do not have access to internet |
| and needs money, it's there instantly.'(S2 | - 'Not everybody has access to the internet.'(S1 Haitians NY +-ed |
| Haitians NY +edu) | - 'Because I don't have a computer at home.'(S5 Dom NY -edu) |
| e) I prefer using pay | e) The service of transferring via internet is unavailable |
| - 'Now I don't send money | - 'That doesn't exist. That service is not available.'(S2 Haitians NY +edu) |
| because I have other options. I use pay pal.' (S2 Haitians NY +edu) | - 'I don't know, I've never heard of anything like that.'(S2 Haitians NY +edu) |

### 2.6 Opinion of Prepaid Cards as a Transferring Alternative

Once participants understood the term 'prepaid card,' about half of the Remitters claimed to have used pre-paid phone cards (gift cards are less popular) and made references to how affordable calling long distance to Haiti or the Dominican Republic has become as a result of these cards.

Prepaid cards had a mix reception. People were appreciative of the variety of the dollar amounts available ( $\$ 5$, US\$10, US\$15 cards). Those who did not like prepaid cards shared concrete negative experiences, such as the cards not working. Complaints focused on expiration dates, damage to the cards that resulted in loss of funds, payment not matched to usage, and lack of customer service.


Participants also criticized prepaid cards because they said that fees were added to card transactions as if there was a middleman, increasing the cost of the product being bought. A few participants added that cards are not available in rural areas; that there is no way for them to protect themselves from a dishonest vendor if paying with a prepaid card; and that a prepaid card does not allow for any control of the use of the remittance. Participants said that instead of using prepaid cards as a money transferring option, they would rather pay for items with cash or with a credit card directly or keep using the regular money transfer agencies. The positive opinions about transferring money via prepaid card were that cards could be a useful alternative for people who do not have credit cards and that they could save on delivery costs.

d) To buy products offshore, it is convenient if people do not have credit cards

- 'Yeah! Maybe I would use a pre paid if I don't have a credit card.'(S2 Haitians NY +edu)
- 'Pre paid makes it easier for people who don't have credit cards.'(S2 Haitians NY +edu)
- 'I would do it. It's like a Macy's card. That would be nice.'(S2 Haitians NY +edu)
- 'If you have a company in Haiti that sells sustainable products, the company could sell the cards. Then you can buy them here and your family can get the card and they can get the product there.'(S2 Haitians NY +edu)
e) To buy products offshore, it is good because you save delivery costs
- 'It's like a Christmas gift but it's cheaper because I don't have to pay for sending it.'(S6 Dom NY-edu)
a) The cards expire and you lose money
- 'After a month they don't work.'(S1 Haitians NY +-edu)
'Too expensive, void quickly, it is convenient and easy to use, cheap US\$2-\$5.'(S1 Haitians NY +edu) money.'(S2 Haitians NY +edu)
- 'If you don't use it fast, they expire.'(S3 Haitians NY +-edu)
- 'Sometimes, I buy 5 hours and only use it for one hour, the next time I use it, it is dead.'(S3 Haitians $N Y$ +-edu)
b) If it does not work, it costs anyway
- 'They lie. Empty promises. They claim it's for 100 minutes, but you only get 40 minutes.' (S1 Haitians NY +-edu).
- 'Once you scratch them, sometimes they don't work.'(S3 Haitians NY +-edu)
'If you try to call and don't connect, the cards use your money anyways. Better with phone companies like Verizon for long distance.'(S3 Haitians NY +-edu)
c) They charge fees
- 'I lose them (the cards). They charge fees.'(S3 Haitians NY +-edu)
- 'I have a personal interest to get rid of pre-paid card because they are a rip off.'(S3 Haitians NY +edu)
- 'I don't like it because nothing is free. Not for me.'(S6 Dom NY -edu)
d) Cannot get assistance them.'(S3 Haitians NY +-edu)
e) To buy products offshore, prepaid cards add fees (like a middleman) and are not available in rural areas
- 'So it would be a vendor in Haiti? Like a store? The process is too long.'(S2 Haitians NY +edu)
- 'The individual is limited because they can only use that store and it might not be in the rural areas. Some stores might not be accessible outside the city.'(S2 Haitians NY +edu)
- 'Depends on the fee. If buying the card is the same as using the middle man, then why use the prepaid card?'(S2 Haitians NY +edu)
- I was excited about a card but there might be a fee. Now, I'm not so excited.'(S2 Haitians NY +edu)
- 'I would use the middle man instead of the prepaid if the fees are the same.'(S2 Haitians NY +edu)
f) To buy products offshore, I prefer using my credit card
'Product can be paid in cash or credit card.'(S2 Haitians NY +edu)
- 'Better to buy it there with Amex - Amex gives you a guarantee. People buy through the computer and it's cheap.'(S4 Dom NY +edu)
- 'You don't need a pre-paid card. I have a credit card in the Dominican Republic and I wouldn't use pre-paid. I can also use the debit card.' (S4 Dom NY +edu)
g) To buy products offshore, I prefer to pay cash to the vendor
- 'My question is... Can you pay in cash? I would rather not pay with cards. I want to pay with cash.'(S2 Haitians NY +edu)
- 'I would like to buy it directly. Person to person. I'm not going to buy a prepaid card.'(S2 Haitians $N Y$ +edu)
h) To buy products offshore, prepaid is not convenient because the vendor can be dishonest
- I don't like it. If I send the product prepaid, but I'm in another country, and they can give my people a product that doesn't work. The merchant could be dishonest.'(S5 Dom NY -edu)
i) To buy products offshore, there is no control of the money with a prepaid card
'They wouldn't accept it and I would not do it because it's like sending money from the bank but

| Prepaid Cards |  |
| :---: | :--- |
| Like |  |
|  | without having control.' ${ }^{\prime}$ (S6 Dom NY-edu) |

## 3. Energy and Electricity Supply in Haiti and the Dominican Republic

### 3.1 Importance and Quality of Energy Services

When New York participants were asked about the energy situation in their countries of origin, some simply had a big laugh. Haitians and Dominicans are aware that service is poor in both countries, with the exception of some isolated spots: 'People don't get it (energy)...only the moon light.' The graph illustrates that, according to Haitians and Dominicans in New York, fewer people in Haiti are connected to the grid when compared to people in the Dominican Republic, however, Remitters from both places feel that the energy situation in their respective countries is appalling.

Everybody answered that energy is very important for all aspects of life, but due to the lack of government supply, people have to choose between two options: live without it or generate energy themselves. This situation has become an obstacle for development, as children cannot study at night, and personal security concerns increase when there is no electricity at night. Both countries have major energy challenges and the end result is similar; however, Remitters suggested that the problem in Haiti is the lack of infrastructure whereas the problem in the Dominican Republic is the unreliability of the existing electricity system and illegal wiring.


According to Remitters, the vast majority of people in both countries suffer from constant and daily blackouts: some during the day, others during the night. Some people go up to eight hours without service or get two to three hours of electricity a day. People can spend full days without electricity and it seems that service is worse in poor and rural areas; both capitals have continuous blackouts. In the Dominican Republic, participants said that today there are more cases of black outs than in the past - and not only in poor areas but in wealthy areas as well. Several Remitters noted that there was a national power cut recently. People blame the government and believe that big corporations are taking advantage of the situation: 'This is related to a political issue. All three parties are the same because they supported the privatization (of the electric company). In 1998, they told the people that this would solve the issue of electricity. It went to the private sector and the rich people in the country have shares. It's a mess, and in the end, the country is in the dark.'

Remitters feel that the energy bills paid by their families, especially those in the Dominican Republic, are too high. In addition, they complain that the bills and the service provided are not matched. Family members never know what they are paying for and, in most cases, those who do have electricity feel that they could be paying for the whole neighborhood: 'we pay for the blackouts.' In general, people are frustrated because service is not reliable.

When asked about the role of remittances, Remitters reported that $25 \%$ of the money received is used to pay the electricity bill. Some family members pay from US $\$ 150$ to US $\$ 350$ a month for electricity; others referred to an average of US\$15 to US\$40. The average amount paid for electricity in Haiti is US\$40 to US\$50 a month. However, fewer Haitian Remitters commented on the cost and instead focused on the fact that people simply do not receive the service.

| People Live without Energy Supply | Irregular Service in Terms of Areas |
| :---: | :---: |
| a) Energy is very important but there is no service and people live without it <br> - 'Ha! What service! Not dependable. There is no electricity. '(S1 Haitians NY +-edu) <br> - 'I was there for a week and I didn't see light any day.'(S2 Haitians NY +edu) <br> - 'At least I saw it once; otherwise it was the moon light.'(S2 Haitians NY +edu) <br> - 'We don't have electricity.'(S3 Haitians NY +-edu) <br> - 'In PAP there is electricity but they can't use it. People don't get it.'(S3 Haitians NY +-edu) <br> b) There is no government supply, so people have to provide it for themselves <br> - 'People need to get their own generators, invertors, batteries, etc... Many have to provide for themselves.'(S1 Haitians NY +edu) <br> - 'It's very important. It's a necessity. One way or another they have to have it.'(S1 Haitians NY +-edu) <br> - 'There used to be government providers but not anymore. Generators are used frequently because electricity is not reliable. My father uses a generator.'(S1 Haitians NY +-edu) <br> - 'They do it themselves. There is no government supply. So most people go without it.'(S2 Haitians NY +edu) <br> c) Electricity supply has improved lately (Haiti) <br> - 'The President of Venezuela is helping. We have electricity 20 out of 24 hours on average, and we have it 7 days a wee, before, you could get 2 hours a day. This is a special gift from Chavez.'(S2 Haitians NY +edu) <br> - 'In my town, we do have electricity 24 hours a day.'(S2 Haitians NY +edu) <br> - 'There is a big improvement. Lately, on the weekend my family gets 12 hours.'(S3 Haitians NY +-edu) | a) Service is worse in poor and rural areas <br> - 'It depends on the area. There is poor service in rural areas. Centers are better served. If you are close to a hospital or to big shots, you are better served.'(S1 Haitians NY +-edu) <br> - 'It depends on the sector. In some, the electricity is shut off once a week. In the rich areas, it is cut off once a week, but in the poor neighborhoods, you never know when it will be cut off.'(S6 Dom NY-edu) <br> - In the poor neighborhoods there is a lot of vandalism and the electricity stays on to avoid crime. In San Pedro, there is electricity in the poor areas during the night.'(S6 Dom NY -edu) <br> - In Santiago there are no power cuts. The electricity goes out but only for a minute and then returns. Hipólito (former President) is from there which is why there are no power cuts there.'(S6 Dom $N Y$-edu) <br> b) It is irregular in general <br> - 'Some areas have access to electricity for 24 hours. But some for only 2 or 3 hours a day.'(S1 Haitians NY +-edu) <br> - 'Not every where not every day.'(S2 Haitians NY +edu) <br> - 'No! Not all of the areas have it.'(S3 Haitians NY +-edu) |

## Blackouts All Day Long

a) During the day, you are lucky when there is energy supply

- 'We have lots of blackouts. '(S1 Haitians NY +-edu)
- 'Sometimes they have it for 12 hours a day. Sometimes you get electricity for 3 hours and then they take it.'(S1 Haitians NY +-edu)
- 'Usually during the week they have electricity from 8am to 11am. The electricity is used for the businesses.'(S3 Haitians NY +-edu)
- 'It's common for the power to go out, and sometimes you can go 8 hours without it.'(S4 Dom NY +edu)
- 'The service is bad and sometimes they spend the day without electricity. They can go 8 hours without electricity. The power is cut every day, since Trujillo's days.'(S5 Dom NY -edu)
b) Electricity comes during the night
- 'You're lucky if you have it. You wake up in the middle of the night and you might have it for 4 hours... when you're sleeping.'(S2 Haitians $N Y$ +edu)
- 'The electricity was on at night when we were sleeping, but we didn't even know we had it.'(S3 Haitians NY +-edu)


## c) Can spend many days without electricity

- 'Limited amount of time they are provided electricity. You can spend days without electricity.'(S1 Haitians NY +-edu)
- 'I spent 14 days in Haiti and during that time we had electricity twice for 4 hours.'(S3 Haitians NY +-edu)
- 'I was without electricity for two months the last time I was in the DR.'(S6 Dom NY -edu)
d) In extreme cases, there are even national power cuts (DR)
- 'There are power outages in rich and poor areas. This is the worst crisis I have seen in 27 years.'(S4 Dom NY +edu)
- I live where the Vice-president lives and the power goes out; sometimes you go 12 hours without electricity. That started 6 months ago.'(S4 Dom NY +edu)
- 'A few days ago there was a country-wide power outage.'(S4 Dom NY +edu)
- 'A month or two ago there was a countrywide blackout. The power was out, and it was out for everyone.'(S5 Dom NY -edu)


| Makes it Difficult to Study | Increases Public Insecurity | Lack of Infrastructure |
| :---: | :---: | :---: |
| - 'No electricity for kids to study at night in Haiti.'(S1 Haitians NY +-edu) <br> - 'We don't have electricity in the highways or the library. We want to get it so that students can come to study and can stay late and study at night.'(S2 Haitians NY +edu) | - 'Crime increases, people steal during the night. That's the reality.'(S4 Dom NY +edu) <br> - 'When there is no electricity in the rich areas, it allows the poor people to steal from the rich.'(S6 Dom NYedu) <br> - 'My house was robbed (in DR).'(S6 Dom NY -edu) <br> - 'I was attacked in the street and my car was stolen.'(S6 Dom NY -edu) | - 'No movies, no light, we can't get involved in development without energy.'(S2 Haitians NY +edu) <br> - 'Food is the biggest problem... second would be energy. We have a lot of problems like electricity, roads, jobs, communication, telephones, food.'(S2 Haitians NY +edu) <br> - 'Infrastructure... that's what we are trying to repair. Like basic water! We don't have drinking water everywhere.'(S2 Haitians NY +edu) <br> - 'There is no infrastructure. It's a big problem. It's an explosive topic.'(S2 Haitians NY +edu) |

### 3.2 Ways to Address the Lack of Energy Supply in the Home Country

There are several ways in which the participants' families address the energy shortcomings in their countries. First, they combine the use of candles, batteries and kerosene lamps. Second, they purchase inverters and/or generators and/or solar panels, depending on the level of income and on the number of people who send remittances to them. Third, people have had to change their living habits. Fourth, they alternate energy sources and home appliances. Fifth, people in the Dominican Republic steal electricity from the grid.

Candles are used everywhere, although there were comments about the danger of fires. Inverters and generators provide electricity for everything. A majority of the Remitter's families have inverters and a smaller number own generators. According to participants, inverters are very popular because they serve as a back-up system to provide power when the electric company fails to provide it. They are more affordable than generators; depending on the capacity, an inverter costs US $\$ 300$, US $\$ 500$ or US $\$ 1,000$. Inverters are helpful to store energy, and are charged by generators or directly from the grid. This means that people need to keep on paying their electricity bills in order to be able to charge inverters. Generators, on the other hand, are considered a luxury because people not only need to pay for the generator itself - US $\$ 400$, US $\$ 650$, US $\$ 750$, US $\$ 1,500$ depending on the capacity - but also need to provide money to pay for gasoline, which can represent an additional cost of US\$200 to US\$400 per month for generating approximately six hours of energy a day. Generators can be bought locally, although several Remitters have shipped them to their families. 'I have two lives!' said a Haitian participant who sent a generator to Miami to be shipped to her home in Haiti.

There were always participants in these groups who spontaneously mentioned solar panels as a mean to provide energy at home, in rural and urban areas. However, these energy devices are thought of as the most expensive resource. All comments about solar panels are contained in the next chapter.

Dominican Remitters noted that another way to overcome local electricity deficiencies is by changing living habits. People have had to modify their habits: they are always aware when electricity comes back on, in order to charge the inverters and have them ready to use in case of a black out; they also learn to live without energy, and 'must put up with mosquitoes and insecurity, or sleep on the floor because the bed was too hot.' When electricity is on (usually at night), participants said that their families take that time to do house chores that require electricity, like laundry.

Both Haitians and Dominicans alternate energy sources, from batteries to inverters to generators to solar panels. Dominicans in particular also rotate the use of home appliances. For example, a person said that she rations the energy by powering the refrigerator for six hours, and then turns it off to power the television for three hours. It is not possible to use all of the home electronic devices at the same time due to the lack of power. It is also common not to use home appliances at all.

Finally, stealing electricity is very widespread in the Dominican Republic as a mean to address the lack of energy. Remitters said that people connect to other people's lines and have double connections; they have two meters, and tamper with the electricity bills. Some steal the cables and sell them to get extra money. Everyone seems to know of people who are getting their electricity illegally, or someone who has been hurt connecting to the grid illegally. They said that poor neighborhoods tend to get electricity at night because the government wants to stop vandalism in those areas. In their minds, they see stealing as something that is justified. People are willing to take chances with their lives or the authorities in order to get electricity illegally. Dominican participants, both in New York and in the Dominican Republic, recognize that stealing electricity is culturally ingrained among both wealthy and poor people. It seems like a vicious circle: people are upset with paying for a service that they are not getting, plus they have to spend additional money in order to provide for their own energy sources, so they steal energy whenever they have the opportunity as a means to compensate for frustration. The main issue is that they simply do not get good reliable service.

| Combine the Use of Candles, Batteries and Kerosene/Oil Lamps | Use Inverters and Generators |
| :---: | :---: |
| - 'But when they don't have electricity, they use candles, handmade oil lamps, batteries to operate flashlights.'(S1 Haitians NY +-edu) <br> - 'They use generators, batteries and candles'(S1 Haitians NY +-edu) <br> - 'Gasoline and kerosene.'(S1 Haitians NY +-edu) <br> - 'Combine invertors and batteries.'(S1 Haitians NY +-edu) <br> - 'Candle light, flash lights, but batteries are expensive.'(S2 Haitians NY +edu) <br> - 'They light candles. They buy generators.'(S2 Haitians NY +edu) <br> - 'Kerosene lamps and candles.'(S3 Haitians NY +edu) <br> - 'Kerosene gas lamps are used for lighting; also you need candles.'(S4 Dom NY +edu) <br> - 'There are fires because of the use of candles.'(S5 Dom NY-edu) | a) Generators charge inverters, which store energy <br> - 'The generators are used but then they have to shut it down to charge the batteries. After the batteries provide the electricity then you start using the inverters.'(S2 Haitians NY +edu) <br> - 'With generators and inverters that store energy, and when the lights goes out, you can use it.'(S4 Dom NY +edu) <br> - 'The generators charge the inverters, the inverter charges for 12 hours to provide 6 hours of electricity. But when the power goes out, you can't charge the inverter.'(S4 Dom NY +edu) <br> b) Generators and inverters provide energy for everything <br> - 'You use the inverters and converters for all needs: fridge, lights, for everything.'(S2 Haitians NY +edu) <br> - 'In Port au Prince people have converters or generators. Otherwise they don't have electricity.'(S3 Haitians NY +-edu) <br> - 'Using inverters or energy plants. If you have it, you use it; if not, candles.' (S5 Dom NY-edu) |


| Inverter: Characteristics |  |
| :---: | :---: |
|  | Inverters are more affordable than generators |
| - | 'I have both an inverter and generator. The inverter is cheaper and it works just with the battery. The generator needs gasoline and it's very expensive. The inverter charges with electricity when the power is on.'(S6 Dom NY -edu) |
| b) | Cost of inverters: US\$300, US\$500, US\$1,000, depending on the capacity |
| - | 'Inverters are expensive. They cost between US\$300 to US\$3000 , depending on capacity.'(S2 Haitians NY +edu) |
| - | 'I have an inverter...that was US\$500. That gives me light for 24 hours.'(S3 Haitians NY +-edu) |
| - | 'Inverters cost US\$300 and can be used for 4 hours, but at my house they don't use them because we don't have money.'(S4 Dom NY +edu) |
| - | 'The cost varies, but it's about US\$600 more or less.'(S6 Dom NY -edu) |
| - | 'I bought one and it cost me US\$1000. I bought it over there and one week later it was stolen. All they left was the battery.'(S6 Dom NY edu) |
| c) | ...however, not everyone has money to buy them |
| - | 'Inverters are a good system. There are 7,000 people in my town but only 5 families have this system.'(S2 Haitians NY +edu) |
| - | 'I would like to send one but it's very expensive. Middle-class people have them but poor people can't buy them. $60 \%$ of these products come from Japan.'(S4 Dom NY +edu) |
| - | 'There are inverters that you can buy in NY and take them to the DR, but that technology is for millionaires.'(S4 Dom NY +edu) |
| - | 'My mother bought one. We helped buy it but I don't know how much it cost. I helped them with US\$100 more or less.'(S6 Dom NY -edu) |
| d) | Inverters are very popular |
| - | 'Inverters are a big thing.'(S2 Haitians NY +edu) |
| - | 'Everybody has them, even the poorest people. The inverter is used a lot. When the power plant is overcharged, it is used.'(S5 Dom NYedu) |
| - | 'Everyone has an inverter.'(S6 Dom NY-edu) |
| e) | Need to keep paying for electricity to charge inverters |
| - | 'I don't know how much they cost because my brother bought them. But you have to keep paying for electricity to use them.'(S2 Haitians $N Y$ +edu) |
| - | 'In Nagua (North) there are cables but no electricity. My mother has an inverter, but there is no electricity.'(S6 Dom NY-edu) |
| f) | Not everyone knows how to use them |
| - | 'People don't know how to use the inverters and that's why refrigerators and televisions break.'(S4 Dom NY +edu) |

## Generator: Characteristics

a) Generators are a luxury and you also need to pay for fuel

- 'I have to provide my own electricity, buy gas and have my own generator. '(S1 Haitians NY +-edu)
- 'We use generators and buy gas but it's expensive to feed the generators with gas to run the generator.'(S2 Haitians NY +edu)
- 'I am in the process of getting a generator that uses gasoline. Generators are reliable.'(S3 Haitians NY +-edu)
b) Cost of generators: US\$400, US\$650, US\$750, US\$1,500, depending on the capacity
- 'A lot! For a good generator US\$650. Someone had one for US\$1500. This does not include shipping. '(S1 Haitians NY +-edu)
- 'A generator costs US\$150. 500 watts are US\$650. We are financing those purchases. We get both invertors and generators in the USA and ship them to Haiti.'(S1 Haitians NY +-edu)
- 'Generators are US\$1000 to US\$10,000 ; it depends on capacity. For one light bulb you can pay US\$40. There are small ones for US\$200.'(S2 Haitians NY +edu)
- 'People who have relatives in the US have a generator. They cost US\$1,500 ... US\$750 for a smaller one.'(S2 Haitians NY +edu)
- 'It is becoming common, but not for everyone. They can't afford it. Generators are expensive. They can cost US\$700 for a small one.'(S2 Haitians NY +edu)
- 'The higher you go in kilowatts the more you pay.'(S3 Haitians NY +-edu)
- 'Generators are more expensive. Here they cost US\$400 but they need fuel.'(S4 Dom NY +edu)
c) Cost of fuel for generators: US\$200 to US\$400 monthly
- 'If you use it for 6 hours... In an evening you will burn about 2 gallons ... that's for 6 hours. We are talking about US\$400 a month.'(S1 Haitians NY +-edu)
- 'It's expensive. More than US\$50 for the generator because you have to use gas. At least US\$200 or US\$300 a month on gas and the generator.'(S1 Haitians NY +-edu)
- 'Generators are a luxury. It is expensive ...not so much the generator but the gas. Gas is US\$6 per gallon.'(S3 Haitians NY +-edu)
- 'I know that you need to pay US\$700 for diesel fuel to power a hospital for 8 hours. It is a small hospital.'(S3 Haitians NY +-edu)
- 'For a house... we need 30 kilowatts that is 5 times less. That's about US\$16 per day to run a generator.'(S3 Haitians NY +-edu)
d) Remitters ship generators
- 'I send generators to Haiti from NY. They get gasoline, batteries, etc. locally to maintain the products. It becomes expensive. Too much to run.'(S1 Haitians NY +-edu)
- 'I buy goods in the US and send them to Haiti. '(S1 Haitians NY +-edu)

| Modify Living Habits | Al |
| :--- | :--- | :--- |
| a) | Have to be aware when light comes to charge the inverters |
| - | 'People prepare the inverters to watch their programs when the power returns, at |
| around 1 a.m. Even human behavior changes (due to the lack of power).'(S4 Dom |  |
|  |  |
| $-\quad$'In La Romana between 7am and 4pm they charge the inverters. If there's electricity <br> during the day they wash and do what they have to do and at night they use the <br> inverters.'(S6 Dom NY -edu) |  |

Alternate Energy Sources and Home Appliances
a) Alternate energy sources

- 'I am now used to it... now I have light. My inverter goes down at night. To ensure that I have light, I have to have connection to batteries. I use 9 watt batteries.'(S3 Haitians NY +-edu)
b) Alternate the use of home appliances
- 'I have a small fridge... but I can only let it run for 6 hours. After 6 hours I have to shot it down or I will not have power for TV (uses TV for 3 hours). We have to ration my electricity.'(S3 Haitians NY +-edu)
c) Do not use home appliances
- 'If there's no power, even the mosquitoes use paper to fan themselves... clothes dry on the patio, you use the sun, no dryers are used. The electrical service is awful. I thank God that I am in this country (US).'(S4 Dom NY +edu)


## c) Wash clothes at night

'In the morning there was electricity, and then it would stop, and then it would be back in the middle of the night. During those hours people took advantage of it because they know at what time it comes back so they do their wash.'(S6 Dom NY -edu)

## Steal Electricity with Illegal Wiring

a) People steal electricity by connecting to others' lines

- 'Each neighborhood has different electricity. Some houses have two meters and when there's electricity in one, the other isn't used. They connect wires directly to another line to steal electricity.' (S5 Dom NY -edu)
- 'They send someone who knows how to do this and they give him a line that is then connected to someone else's connector, or to the lines in other people's houses or neighborhoods. We complain to the government that they steal, but everybody does it.'(S5 Dom NY -edu)
- 'Some people have their own lines, but they connect the heavy things, like refrigeration, to other people's lines.'(S5 Dom NY -edu)
- 'The government comes and shuts off the electricity, but people find professionals who can hook them up directly to the line. People steal the energy.' (S6 Dom NY-edu)
- 'Everyone should do it. If they don't give them electricity, then they should steal it.'(S6 Dom NY -edu)
b) People also steal the wires
- 'They steal the "wire" everywhere and sell it (the cable-literally). It is very common for families to have an illegal connection so as not to pay for electricity.'(S6 Dom NY -edu)
- 'If I don't have money but I want cables, someone will sell me stolen ones, and I buy my wire. If it's cheaper, I'll buy it. I don't care if it's stolen.'(S6 Dom NY -edu)
c) Stealing electricity is part of the culture (DR)
- 'They make a double connection and steal it.'(S4 Dom NY +edu)
- 'We have to recognize that there's a culture of people who steal electricity, and not just poor people, also the rich.'(S5 Dom NY -edu)
- 'What I think is that it's all cultural. Dominicans don't like to buy electricity. My uncle has an inverter, but he doesn't want to pay to charge it. The Pope would have to make a miracle for my uncle to change. It's in his soul.'(S6 Dom NY -edu)
- 'One woman who did that got fined. It's cultural and a bad habit. But if there are people who can't pay for it, then they're right to steal it.'(S6 Dom NY -edu)
- 'My cousin connected us to the neighbor and my mother didn't know. It was illegal.'(S6 Dom NY -edu)
d) Double connections are unsafe
- 'The connections are unsafe and people hook onto them. It's difficult to cut their power because it's dangerous to disconnect these line; they have to go into those poor areas.'(S5 Dom NY -edu)
- 'People have died trying to steal electricity.'(S5 Dom NY -edu)
- 'The problem has always been there, but in the last few years people use more electricity because it's hotter; also there are computers, refrigeration, and radios.'(S5 Dom NY-edu)
e) Bills are altered
- 'The electric bills are altered. Those who most take advantage of stealing energy are the large businesses. They consume the equivalent of an entire neighborhood.'(S5 Dom NY-edu)


## 4. Knowledge of Sustainable Energy Products

Among Haitian and Dominican participants in New York, there is a varying degree of knowledge about sustainable energy products. Some have no idea at all; others have just heard about these products and are aware that they exist but are not able to describe them; some have seen them on top of houses in Haiti and the Dominican Republic, in stores in New York or back home, or have seen them in TV advertisements. In particular, some Dominican participants blame the government in the Dominican Republic for not bringing sustainable energy products into their country. These participants feel that the government needs to give incentives to the public and to educate people about the advantages of such products.


Nevertheless, all the focus groups included at least a few participants with good knowledge on the topic. There were a couple of participants that had already conducted research on sustainable energy products in New York and were educated about attributes and prices; some of them already own and use sustainable energy products, such as solar panels and flashlights. In general, people showed interest in learning more about these products and providing them for their families.

To understand pricing knowledge, it was important to distinguish between participants who had little knowledge on the topic and people conversant on the topic. In general, most Remitters are under the impression that sustainable energy products are very expensive. More knowledgeable participants confirmed that these products are expensive. On lighting in particular, they noted that one panel is not enough to adequately light a household, multiple panels are needed which increases costs. However, there were comments about long-term value because even though the initial investment is high, the units become cost efficient in the long run. This is due to the fact that the cost of maintenance is low and that there will be no more fuel bills: 'we are not paying for the sun. It's cheaper.' They realize that the amount of money being paid today for energy is very large. Many hope that these products will become more affordable with further technology development. Some mentioned that batteries for solar energy products are very expensive as well. They also noted that sustainable energy is good for the environment.

## No or little knowledge

## a) Do not know

- 'I don't know what that is.'(S1 Haitians NY +-edu)
- 'I don't know but would like to find out. '(S1 Haitians NY +-edu)
- 'I don't know nothing about those things. We guess.'(S2 Haitians NY +edu)
- 'It's wind technology.'(S5 Dom NY -edu)
- 'In the Dominican Republic there hasn't been much information.'(S5 Dom NY -edu)


## b) Only know that these products exist

- 'I know they exist.'(S3 Haitians NY +-edu)
- 'In 2004 for some reason new things were installed in Las Cahobas. Since then we have hydroelectricity.'(S3 Haitians NY +-edu)
- 'I know that China is very advanced and has solar lamps and panels.'(S5 Dom NY -edu)
- 'There's an Arab project here in NY for Dominicans that put solar energy in the DR.'(S5 Dom NY -edu)

a) We have a solar panel
- 'My family has a solar panel on the roof of my vacation house. The panel they use works great!'(S1 Haitians NY +-edu)
- 'Lots of people have two systems; the other is with solar panels in case the electricity is down.'(S2 Haitians NY +edu)


## b) We have solar flashlights

- 'In our association, we already started a little program that uses solar flashlights, solar chargers, and ovens. We are looking into it because of the hurricanes to help prevent disasters in Haiti. We have that technology and we are working with FEDADSE.'(S2 Haitians NY +edu)
- 'We have the solar flashlight. I buy them in Japan through the Internet and then we send them to Haiti. We pay a lot in shipping and most of the cost is in the delivery.'(S2 Haitians NY +edu)

```
a) Expensive because one panel is not enough to cover needs
- 'I asked for an estimate. It costs about US$15,000 to install and set up the whole system for a solar panel. With this, you can have
    (energy) for TV and all other stuff.'(S3 Haitians NY +-edu)
- 'We also have solar energy. It cost US$10,000 to run computers for our library (in Haiti). It can give you 24 hours of light, but we also
    need to power computers. Every time the power goes out we need to fix the computers.'(S3 Haitians NY +-edu)
- 'One panel isn't enough. You need around 6 panels with constant sunlight for enough energy for one house, and each panel costs
    US$1000. It will take 15 years to pay for it if you are making payments of US$100 per month.'(S4 Dom NY +edu)
- 'The solar panel for heating water costs US$70,000 pesos ($2,000) but only for bathing.'(S5 Dom NY -edu)
- 'I went to the store here (NY) to make a budget, so as not to be dependent on the electric company in DR. It costs US$100,000 to
become completely independent from the electric company. This provides you with all the electricity of a small house with
    refrigerator, light, fans and air conditionings.'(S5 Dom NY -edu)
b) The first investment is high
- 'Yes, it is expensive but only one payment.' (S1 Haitians NY +-edu)
- 'I think they are expensive.'(S2 Haitians NY +edu)
- 'We don't have them like the US has them. It's not easily available. The upfront cost is very expensive. Of 30 families, you will have 2
or 3 (in Haiti) who would have them, and then you have a dark street.'(S2 Haitians NY +edu)
- 'Solar energy panels. But it's expensive! The first investment is high. Solar panels (3 by 4) are US$700 .'(S3 Haitians NY +-edu)
c) Expensive, but cost of maintenance is low
- 'Solar panels are economical in the long run. We have them there for years... we have them here in NY too. They charge with the sun.
    US$40 for a set of 8 lights.'(S3 Haitians NY +-edu)
- 'It's expensive to get at first, but then the maintenance is less expensive. The problem is getting it. That's what's expensive.'(S6 Dom
    NY -edu)
d) Expensive, but getting affordable
- 'Solar technology has been around for a long time, but we couldn't afford it. Now it's getting better.'(S2 Haitians NY +edu)
- 'The cost has to go down since nobody wants to pay for 6 years in order to buy it. I can't save up that much money.'(S4 Dom NY +edu)
```


### 4.1 Qualities Valued in Sustainable Energy Technologies

The most valued attribute of sustainable technology among Haitian participants is that it is good for the environment. There is a major concern about the high level of deforestation in Haiti because people use wood for cooking. Remitters like that this technology provides clean energy and protection for the environment. Other important qualities are that with the use of solar energy, there are no electricity bills to pay, 'the sun is free;' that it is a reliable source of energy over a long period of time; that it offers self-sufficiency and independence from the electricity companies; that some of the products are mobile; and that the clean energy sector can create new jobs for people in maintenance and installation.

People expressed some concerns about this technology. They worry about the effectiveness of solar power due to the lack of sunshine during the rainy season. Some participants heard that batteries could not charge the panels. Also, they said that there is little information about this technology so people still feel that that they need to hear good recommendations about these products, know where there are available for purchase and see how others use them in order to purchase them.

| It | Reliable |
| :---: | :---: |
| a) Provides clean energy and protect the environment <br> - 'Sounds cool. Anything that will provide clean energy is worth it. Would suit my family needs, yes!' (S1 Haitians NY +-edu) <br> - 'I think in Haiti we need to protect the trees from being used and protect the environment.'(S2 Haitians NY +edu) <br> - 'They are cutting trees every day to make charcoal for baking, heating, for cooking. Deforestation is a problem.'(S2 Haitians NY +edu) <br> - 'Eco-friendly. That it can help people to protect the environment every day.'(S2 Haitians $N Y$ +edu) <br> - 'This is a big problem. We don't have trees. Because we use trees for cooking - we need new products to supply the energy.'(S3 Haitians NY +-edu) <br> - 'It's not harmful to the environment and it charges with the sun. This would solve the problem.'(S6 Dom NY -edu) <br> b) Using solar energy, there are no bills to pay <br> - 'We are not paying a bill. It is powered by nature.'(S1 Haitians NY +-edu) <br> - 'We have the solar system. It is installed on the roof, works well by providing electricity all the time. I like it because it is using an unlimited natural resource - the sun.'(S1 Haitians NY +-edu) <br> - 'It's cheaper to be able to use the sun that we are not paying for.'(S1 Haitians NY +-edu) <br> - 'We have a plan to get it because we think that sustainable energy is more affordable than electricity.'(S2 Haitians NY +edu) | a) Sustainable for a long time <br> - 'I have used it. I have solar panels in my home. Dusk to dawn - it triples the energy during the day. '(S1 Haitians NY +-edu) <br> - 'The main idea of "sustainability" makes me feel that they are reliable and available.'(S2 Haitians NY +edu) <br> - I see sustainable as something that will last a long time. That is what the word means to me. We need types of energy that are efficient.'(S2 Haitians NY +edu) <br> - 'It's environmental friendly, reliable, and not expensive. Can last for a long time.'(S2 Haitians NY +edu) <br> b) Offers self-sufficiency <br> - 'Independence. I don't rely on the government or depend on the electricity company. '(S1 Haitians NY +-edu) <br> - 'They were going to make them with solar energy. A solar product is used even for heating water.'(S5 Dom NY -edu) <br> - 'It uses a generator.'(S6 Dom NY -edu) |

## Other Qualities

a) Offers mobility

- 'It offers mobility, it is wireless. You can move it from a room to another.' (S1 Haitians $N Y$ +-edu)
b) Can create new jobs
- 'We need people to install it and that might create jobs.'(S1 Haitians NY +-edu)


## Concerns

a) Skepticism about the power of solar energy

- 'I doubt that the energy can be used, that it's not powerful enough - it doesn't have the power for a refrigerator.'(S4 Dom NY +edu)
- 'My brother bought a battery, he brought it from here, the battery charged but in the countryside there is no electricity if it rains, so the batteries can't be charged. He paid for it but it didn't work. '(S5 Dom NY edu)
b) This technology needs further development
- 'We are looking for new products. Our vendors are in Japan and US. We buy them here and send them home to Haiti.'(S2 Haitians NY +edu)
- 'We hope that with the improvement of technology we can have it.'(S3 Haitians NY +-edu)
- 'If people don't recommend it to each other, they don't use it. In the USA it's common, and some day it will be common in the DR.'(S4 Dom NY +edu)
- 'You need a national plan in order to teach people how to use that technology. The government has to invest in educating people.'(S4 Dom NY +edu).
- 'It's a field that needs to keep advancing because it hasn't been perfected yet.'(S5 Dom NY -edu)


### 4.2 Measures to Deal with Robbery of or Damage to Sustainable Energy Products

Without being asked, participants spontaneously expressed concern that solar panels are at risk of being stolen or broken. It was interesting to find out that some people damage the panels simply because of envy: 'If one person doesn't have it, they don't want anyone else to have it.' However, participants expressed that people are finding innovative solutions to this problem, such as putting extra security on panels with an iron grill, making the panel heavier, sealing the panel with cement, and taking it out of the sun and keeping it inside the home when it gets dark.

```
Risks of Robbery and Damage
a) Easy to steal
- 'The original investment is expensive and you need to protect so it doesn't get stolen.'(S1 Haitians NY +-edu)
- 'The day we installed our solar panels, they were stolen the same night.'(S2 Haitians NY +edu)
- 'I have the inverter and the panel. I know that people will steal it.'(S2 Haitians NY +edu)
- 'We don't invite people to the house during the day because they will see it (the panel).'(S3 Haitians NY +-edu)
b) They steal or damage it because of envy
- 'You can use the solar panels but when they steal it, they just break it.'(S2 Haitians NY +edu)
- 'Not for my grandmother because they could rob her or kidnap her because of the panel. If nobody else has it in the area, it's dangerous because in Santo Domingo, if one person doesn't have it, they don't want anyone else to have it.'(S4 Dom NY +edu)
c) Need to put extra security: iron grill, make it heavy, seal it with cement
- 'We need a factory that can install it for you and seal it, so that it's safe and it becomes heavy and if it's removed it will be broken. They won't be able to use it or sell it.'(S2 Haitians NY +edu)
- 'A company solved the problem by making it heavy. That way it's more secure and you have to break the house to take it.'(S2 Haitians NY +edu)
- 'You seal it (solar panels) on the roof with cement. That's one of the concerns...they steal them.'(S3 Haitians NY +-edu)
- 'In Haiti you need to pay to secure it.'(S3 Haitians NY +-edu)
d) I take it out of the sun and then keep it at home
- 'I put them out during the day to charge the panels but when it gets dark I take them in so that they are not stolen.'(S2 Haitians NY +edu)
```


## 5. Presentation of Sustainable Energy Products

Seven solar powered items were presented in each of the focus groups, plus an additional thermal product. Each product was introduced individually with a picture of the item and its major characteristics. First, participants gave their positive and negative opinions about it based on these questions: Would it satisfy the needs of your family in Haiti and the Dominican Republic? Would you like to buy this product for them? Why yes/no? Second, they were asked how much money they would be willing to invest in a product like this one. The idea was to understand price elasticity. Third, the actual price was announced to them and they were asked to give their opinion on that price and indicate whether they would buy it or not at that price.
The exercise described above was carried out with each of the eight products. At the end, participants were asked to give their final assessments and decide which product would better suit the needs of their families in Haiti and the Dominican Republic. In the chart below, the products are organized according to three categories based on preferences manifested by participants: "Most preferred", "Sometimes preferred" and "Least preferred."

| "Most preferred" | Radio, Cell phone and Flashlight Charger |  | Lantern |
| :---: | :---: | :---: | :---: |
| "Sometimes preferred" |  | Cooker | Efficient Wood Burning Stove |
| "Least preferred" | Water purification equipment | Solar Water Heaters | Solar TV |

Among Remitters, there was a huge appetite for sustainable energy products. Everyone was excited to see the different products. There was willingness on their part to facilitate ways for their families in Haiti and the Dominican Republic to get these items. Many participants would like to have all the products, and asked about the existence of other sustainable energy products: 'Are there solar refrigerators?' As they thought more seriously about acquiring these items, various doubts were raised; a key concern was whether these products work at night and during rainy seasons. In general, Remitters wanted to have a demonstration on how they work. They expressed considerable interest in learning more about these products.

## 5.1 "Most Preferred" Sustainable Energy Products

A) Radio, Flashlight and Cell Phone Charger

This was a highly appreciated item because it has many functions. In general, Remitters value the cell phone charging function most, and the radio second, because many of them indicated that they already own a flashlight. They said it would be useful for rural areas, to go camping and for emergencies. They also like that it saves on batteries, and that it offers various ways for generating energy (crank and a solar panel). However, some people were less enthusiastic because they already have a radio or simply do not listen to one. Some had concerns about the functionality of the radio in the hilly parts of the country and were worried that the device had too many functions in one, so it might break easily. The prices given spontaneously were always above the actual cost. As a result, even participants who had expressed certain objections were eager to get this product not only for their families but also to give to other people as a gift. The actual price of US\$35 was considered excellent for all participants.


| Spontaneous Answers on Pricing: Radio, flashlight and cell phone charger | Comments after knowing the actual price: USD US\$35 |
| :---: | :---: |
|  | Positive |
| \$50/\$75/\$175/\$200/\$220 <br> (S1 Haitians NY +-edu) | a) Excellent price |
|  | - 'I would buy it, it's cheap.'(S2 Haitians NY +edu) |
|  | - 'It's good. It's affordable. Do not need batteries? It's for life! '(S2 Haitians NY +edu) |
| \$40/\$60/\$75/\$100/\$150/\$300 <br> (S2 Haitians NY +edu) | - 'You are kidding? That's the most practical.'(S3 Haitians NY +-edu) |
|  | - 'It's cheap and practical.'(S4 Dom NY +edu) |
|  | - 'It's great for US\$35. I'd buy it.'(S5 Dom NY -edu) |
| \$50/\$65/\$80/\$100/\$199/\$200 <br> (S3 Haitians NY +-edu) | - 'Wow! That's cheap. This one I want!'(S6 Dom NY -edu) |
|  | - 'It can be used for the radio. That works for the old folks. We like cheap things, but also good quality.'(S6 Dom NY -edu) |
| (S4 Dom NY +edu) |  |
|  | b) I would buy it for myself, and to give as a gift to many people |
| \$80/\$100/\$150 | - 'At that price everyone would like to buy it. I would buy for everyone in my family. That's cheap'(S1 Haitians NY +-edu) |
| (S5 Dom NY -edu) | - '\$35 is a good price. I would buy 10 of them. '(S1 Haitians NY +-edu) |
|  | - 'Wow! All of us would buy it for US\$35. It's a good gift'(S2 Haitians NY +edu) |
| \$125/\$150/\$400 | - 'We would all buy it for people in Haiti.'(S3 Haitians NY +-edu) |
| (S6 Dom NY -edu) | - 'For US\$35 I would buy ten and go up to the mountains.'(S4 Dom NY +edu) |
|  | - 'A Dominican would put propellers on it for it to give light and air.'(S4 Dom NY +edu) <br> - I'd like it for my brother. It's very good and cheap.'(S6 Dom NY -edu) |

## B) Solar Latern

The solar lantern received only positive comments. Remitters thought it would be very useful in solving their families' lighting problems, without replacing batteries so often. They noted that people are already familiar with the use of oil and gas lamps, so a solar lantern would suit their needs even better. Remitters also noted approvingly that this is a mobile device. There were some participants who indicated that they already own a solar lantern. Regarding its cost, participants guessed very close to the real price and usually suggested higher prices than the actual one. As a result, once they knew its market price of US\$27.50, the expression 'Great! I will buy one for myself and one for my friend' was common.

| Solar Lantern: Before knowing the actual cost |  |
| :---: | :---: |
| Product | Like |
|  | a) It is very useful; can replace the gas/oil lamp and batteries <br> - 'Good replacement of the gas one with a solar charge.'(S1 Haitians NY +-edu) <br> - 'I would use it myself in Haiti when we are short of power. It is the equivalent of our oil lamps, even for here in the US. '(S2 Haitians NY +edu) <br> - 'It's solar and with batteries, and I pay US\$20.'(S3 Haitians NY +-edu) <br> - 'Important for the hill and for light. It doesn't use batteries?'(S5 Dom NY -edu) <br> - 'I like it. This one is good because before you had to use batteries or gas. Fabulous!'(S6 Dom NY -edu) <br> b) It solves electricity needs well <br> - 'We all like it.'(S1 Haitians NY +-edu) <br> - 'People don't have to use electricity. Good for guests.'(S2 Haitians NY +edu) <br> - 'Definitely.'(S3 Haitians NY +-edu) <br> - 'This is the best thing to solve the electrical problem in the DR.'(S4 Dom NY +edu) <br> c) It is mobile, can take it anywhere <br> - 'I'm in! I can take it outside. When we go to our towns or to remote towns we really need those.'(S2 Haitians NY +edu) <br> - 'We need it when we have parties, for meetings in the woods, you can take it out.'(S2 Haitians NY +edu) <br> - 'It's very useful here too for when I go on a picnic.'(S4 Dom NY +edu) <br> - 'To light the house, I hang it from the ceiling.'(S6 Dom NY -edu) <br> - 'For the bathroom outside and for the roads in the country.'(S6 Dom NY -edu) <br> d) I already have one <br> - 'I already bought one.'(S3 Haitians NY +-edu) <br> - 'I already bought it. It cost me US\$45.'(S5 Dom NY -edu) |


| Spontaneous Answers on Pricing: Solar Lantern | Comments after knowing the actual price: USD US\$27.50 |
| :---: | :---: |
|  | Positive |
| \$30/\$100 | a) The price is great! |
| (S1 Haitians NY +-edu) | - 'Very good, everyone would buy it at that price and would use it in Haiti. It's a good thing and they can use it.'(S1 Haitians NY +-edu) |
| \$20/\$30/\$35/\$40/\$50/\$60 | - 'It is charged by solar so we don't have to buy batteries.'(S1 Haitians NY +-edu) |
| (S2 Haitians NY +edu) | - 'That's good. We would buy it. We used to have those in Haiti back in the 70s with gas. For US\$27, it is cheap. It's a good bargain.'(S2 Haitians NY +edu) |
| \$20/\$30 | - 'Everyone. Yes, I would buy it.'(S3 Haitians NY +-edu) |
| (S3 Haitians NY +-edu) | - '\$27! That's great!'(S5 Dom NY -edu) <br> - 'Wow! This one is even better.'(S6 Dom NY -edu) |


| Spontaneous Answers | Comments after knowing the actual price: USD US\$27.50 (continued) |
| :---: | :---: |
| on Pricing: Solar Lantern | Positive |
| \$25/\$35 | b) I would buy more than one |
| (S4 Dom NY +edu) | - 'It's almost free. I would buy two for my library.'(S2 Haitians NY +edu) |
|  | - 'I need two one for home and one for my friend. You can use it outside and inside.'(S2 Haitians NY +edu) |
| $\begin{gathered} \$ 25 / \$ 40 / \$ 50 \\ (\mathrm{~S} 5 \mathrm{Dom} \text { NY -edu) } \end{gathered}$ | - I would buy a few to give them as gifts to people without electricity and who spend many hours without lights - which is a lot of people.'(S6 Dom NY-edu) |
| $\begin{gathered} \$ 25 / \$ 50 / \$ 75 \\ \text { (S6 Dom NY -edu) } \end{gathered}$ |  |

## 5.2 "Sometimes Preferred" Sustainable Energy Products

## A) Lighting Kit

This product generated a lot of interest among many Remitters. The spontaneous comments were that it would definitely satisfy the needs of their families who are constantly suffering from blackouts. The fact that they would also save money by not having to pay electricity bills made the product even more attractive. However, many people were discouraged when they learned that this product only provided lighting. They thought that it would also help them to power other necessary appliances, like the refrigerator, the fan or TV; as they put it, the device only helps to 'solve 20\% of the problem'. In addition, some of those who felt satisfied with the product only offering light commented that it was too low in watts. With regards to the price, there were participants in all groups who were able to closely estimate the actual cost, but most guesses were on the low side. After the actual price was given, there were more negative comments because Remitters found it very expensive. Nevertheless, there were always participants in all groups who believed that this product is a priority and would definitely buy it.

| Lighting kit: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) It definitely satisfies the needs of my family <br> - 'They have me. It's not bad.'(S3 Haitians NY +-edu) <br> - 'Does it have batteries? If it does then I will buy it.'(S3 Haitians NY +-edu) <br> - 'It would satisfy the needs of our families. That's the one I want.'(S1 Haitians NY +-edu) <br> - 'Definitely to be used in Haiti. If it works well it would be good.'(S1 Haitians NY +-edu) <br> - 'If it works for 8 hours; it is good. '(S1 Haitians NY +-edu) <br> - 'It's helpful because we need light to go into our rooms.'(S2 Haitians $N Y$ +edu) <br> - 'OK, that's a good product. I would like to have it at home and for the library.'(S2 Haitians NY +edu) | a) It is limited to lighting. We need energy for everything <br> - 'Only 20 watts! Just for lighting!'(S2 Haitians NY +edu) <br> - 'It has output limitations.'(S4 Dom NY +edu) <br> - 'The inverter has been invented in the DR and they are in everybody's patios. The panel solves $20 \%$ of the problem, so you would need other devices.'(S4 Dom NY +edu) <br> - 'I need more electricity for the refrigerator and the TV. There are panels that can turn on the refrigerator. I would like that better.'(S6 Dom NY -edu) <br> - 'It's small! Is it just for light? Oh, then no.'(S5 Dom NY -edu) | a) About the hours of light <br> - 'One bulb for one room...for how many hours? There is no information.'(S3 Haitians NY +-edu) <br> - Is it for private use? It could be for public use?'(S2 Haitians NY +edu) <br> b) About wiring <br> - I have a problem: the wiring. If it lights up to 6 bulbs, do you wire them separately to go to each room ?'(S3 Haitians NY +-edu) <br> c) About the manufacturing material <br> - 'Is it glass? I am worried about vandalism. If the neighbor doesn't have it they will destroy it.'(S1 Haitians NY +edu) |


| Lighting kit: Before knowing the actual cost (continued) |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | b) It is good for the planet and no bills to pay <br> - 'They're good, and you don't have to pay an electric bill.'(S4 Dom NY +edu) <br> - 'Excellent! Wonderful! It's good for the planet.' (S5 Dom NY -edu) <br> - 'You don't have to pay electricity and we wouldn't have the problem of power outages.'(S5 Dom NY edu) <br> - 'I am there. I need light to read, the children need to study and candles are more expensive. With my nieces and nephews in mind, I would buy it for them to study.'(S6 Dom NYedu) | b) It is too low in watts <br> - I might need four or five of those to use in my home. '(S1 Haitians NY +-edu) <br> - 'It's too low in watts. At least 1000 watts would be needed. For the library (in Haiti) we have 3 computers and light.'(S1 Haitians NY +-edu) <br> - 'It's good if it's only to provide light at night. We need more than that.'(S1 Haitians NY +edu) <br> - I wish that it would be more personalized, smaller or bigger. I would prefer to have fewer bulbs.'(S2 Haitians NY +edu) | d) About its longevity <br> - 'What is the longevity?'(S2 Haitians NY +edu) <br> e) About installation <br> - 'It's interesting, but where would you install it?'(S4 Dom NY +edu) <br> f) I need to see it first <br> - 'I need to see to believe it.'(S3 Haitians NY +-edu) <br> - 'We need to see the actual product. The company needs to have a showroom.'(S1 Haitians NY +-edu) |



## B) Solar Cooker

This was a controversial item. Participants either loved it or found it very problematic; and it attracted plenty of comments. Among the positive observations, several Dominicans thought that their families would benefit from it because the gas service is just as unreliable as electric power. Just as they have black outs, some of them experience gas shortages. With this device, their families would no longer be forced to deal with gas tanks, which cause a lot of accidents, or the truck that provides gas, or worry about cooking with wood when they run out of gas. Both Haitian and Dominican participants agreed that it would also save them money and is environmentally friendly, not only because it does not pollute but also because it helps to protect trees (a concern of some Haitian participants). Others said it would be good for picnics. Many women participants said they were looking forward to buying one. Among the negative aspects, Remitters felt that the solar cooker should come in a larger size because families both in Haiti and Dominican Republic are large and cooking is done for large groups (in the product examples shown to participants the device only allowed for two pots). Remitters disliked that the device would not work for people cooking at night when the sun is not available to heat the cooker, and noted that it takes too long to cook.

Although some participants guessed the price fairly accurately, many participants suggested prices much lower than the actual price. A majority of participants expected this product to be cheaper. Still, some women insisted that it was an ideal object to buy for relatives back home.



| Spontaneous Answers | Comments after knowing the actual price: USD US\$190 |  |
| :---: | :---: | :---: |
| on Pricing: Solar Cooker | Positive | Negative |
| \$50/\$80/\$100/\$200/\$225 <br> (S1 Haitians NY +-edu) | a) The price is right <br> - 'Everyone would buy it for that price. (S1 Haitians NY +-edu) | a) It is expensive, I would not buy it <br> - 'We are looking for alternatives to save the trees but this is expensive'(S2 Haitians NY +edu) |
| \$90/\$180/\$100/\$150/\$200 <br> '(S2 Haitians NY +edu) | - 'A lot of people would buy it. When one has it everyone would want one.'(S1 Haitians NY +edu) | - 'For Haiti it would be an expensive product.'(S2 <br> Haitians NY +edu) <br> - 'Too much. No way. Not for me.'(S3 Haitians NY +-edu) |
| $\begin{gathered} \$ 25 / \$ 50 / \$ 60 / \$ 75 \\ \text { (S3 Haitians NY +-edu) } \end{gathered}$ | - 'Would pay US\$150 for it, US\$190 is OK.'(S1 Haitia NY +-edu) | - 'If you can cook with it more efficiently maybe.'(S3 <br> Haitians NY +-edu) |
| $\$ 300 / \$ 350 / \$ 500$ (S4 Dom NY +edu) | - 'It's not expensive. You won't spend money on charcoal or gasoline. We usually spend money without even knowing'(S2 Haitians NY +edu) <br> - $\quad \$ 190$, that's cheap. I'd buy it.' (S4 Dom NY +edu) | - 'I don't think US\$190 is very cheap and I don't think it works because it's too cheap.'(S4 Dom NY +edu) <br> - I don't like the stove. It's expensive.'(S6 Dom NY -edu) |
| $\begin{gathered} \$ 80 / \$ 100 / \$ 150 \\ \text { (S5 Dom NY -edu) } \end{gathered}$ | - 'I already bought it for my mother.'(S4 Dom NY +edu) <br> - 'Wow! It is good.'(S6 Dom NY -edu) |  |
| $\begin{gathered} \$ 125 / \$ 200 / \$ 200 \\ (\text { S6 Dom NY -edu) } \end{gathered}$ |  |  |

## C) Efficient Wood Burning Cooking Stove

Many Haitian Remitters in New York criticized this product for burning wood at all. However, some people changed their opinion when they learned the price. The fact that they considered it affordable at US\$40 made these people want to buy it, and forget their "pro-environment argument." Other participants continued to feel that the wood burning stove was not a good product (primarily for Haiti) based on their concerns about deforestation; although they felt the price was good, it was irrelevant because of the environmental impact and they said they would never buy the stove. Dominican participants in New York showed less interest in this product, probably because they are more used to cooking with gas.


| Spontaneous Answers on Pricing: Wood Burning Cooking Stove | Comments after knowing the actual price: USD US\$40 |  |
| :---: | :---: | :---: |
|  | Like | Dislike |
| \$25/\$100/\$150/\$400 <br> (S1 Haitians NY +-edu) | a) Price is fabulous: even pro-environment people liked it | a) Price is irrelevant: it still burns wood <br> - 'I still would not buy. I still don't want to use |
| \$50/\$100/\$150 | - 'Majority would buy it for the cheap price.'(S1 Haitians NY +-edu) | wood.'(S1 Haitians NY +-edu) <br> - 'We wouldn't pay US\$40.'(S4 Dom NY +edu) |
| (S2 Haitians NY +edu) | - 'I would buy it because it's less wood but they should try something else. '(S1 Haitians NY +-edu) | - 'Nobody would pay for the product.'(S4 Dom $N Y$ +edu) |
| \$35/\$40/\$50/\$75 <br> (S3 Haitians NY +-edu) | - 'That's good (from same person who said that he wouldn't buy it) '(S1 Haitians NY +-edu) | - 'It only uses wood?'(S5 Dom NY -edu) <br> - 'No, I'm not interested. Not even if it's cheap |
| \$100/\$150 | - 'I would buy it because it takes charcoal.'(S1 Haitians NY +-edu) | because you need wood and if you cut a stick, they fine you.'(S6 Dom NY -edu) |
| (S5 Dom NY -edu) | - 'I would give it to my friends in country side.'(S1 <br> Haitians NY +-edu) |  |
| \$50/\$80/\$100/\$140 | - I have a deposit for you!!'(S2 Haitians NY +edu) |  |
| (S6 Dom NY -edu) | - 'That's good. I want all of them.'(S2 Haitians NY +edu) |  |
|  | - I would get it for US\$40 (same person who would not buy it before because it used wood).'(S2 Haitians NY +edu) <br> - 'Oh! It's not too heavy (22 Ibs.)'(S5 Dom NY -edu) |  |

## 5.3 "Least Preferred" Sustainable Energy Products

## A) Solar Water Purification Equipment

It was interesting to note how people changed their minds about this product once they heard its price. Initially, participants described the importance of clean water in Haiti and the Dominican Republic. They said that people got sick frequently and that it was almost guaranteed that they would get ill every time they visited family members at home because of poor water quality. Some even said that they considered this product to be a priority, and to be the most important among the items presented during the research. However, the market price of US $\$ 480$ discouraged a large majority of these participants and caused them to focus on its low output capacity for a regular sized family. They agreed that they would rather keep boiling water to purify it: 'That price for one liter? I would rather boil water. You can boil water faster.' A minority of participants felt that it would be something they would consider buying only if the plumbing was included and if it was better priced. On the other hand, there were some participants that thought that this was not a useful item from the very beginning. These people considered that water in Haiti and the Dominican Republic is cheap and that the volume of distilled water produced by the equipment is too low. Some added that the solar cooker could produce clean water as well. Finally, the word "distilled" caused certain confusion. Many participants said they would like to have a demonstration to understand how it works.

| Solar water purification equipment: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) This product is a priority <br> - 'I would put it as my first choice...so many people get sick.'(S3 Haitians NY +edu) <br> - 'For two people it will work. That's what I use with my wife.'(S3 Haitians NY +-edu) <br> 'Wow! Yes, I would buy it because it's necessary. The most important (product shown) so far.'(S2 Haitians NY +edu) | a) Do not need it, water in Haiti and DR is cheap <br> - 'We don't cook with clean water.'(S3 Haitians NY +-edu) <br> - 'Water is very cheap there. With US\$10 I can buy a lot because it costs US\$1.50 for half a gallon.'(S4 Dom NY +edu) <br> - 'A family of 4 wouldn't even spend US\$100 per year... You can drink water for US\$6 per month.'(S4 Dom NY +edu) <br> - 'It's not necessary for people over there. For those of us who come from here, yes. I live there and I'm afraid of the water. People are used to drinking it from the tap, but they shouldn't.'(S4 Dom NY +edu) | a) Need a demonstration <br> - 'How does it work? I would get it if I see how it works.'(S1 Haitians NY +-edu) <br> - 'Need to see how it works first. Need a demo. I would pay US\$480 maybe if I can see how it works.'(S1 Haitians NY +-edu) |


| Solar water purification equipment: Before knowing the actual cost (continued) |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | b) Water is very bad, people get sick (Haiti and DR) <br> - 'That is good for Haiti.'(S3 Haitians NY +-edu) <br> - 'Very important. People get sick from the water.'(S2 Haitians NY +edu) <br> - I get sick every time I go to Haiti because I drink the water. I know other people do too.'(S3 Haitians NY +edu) <br> - In Santo Domingo the water is very bad and you can't even drink it filtered, but it's cheap. The water from the faucet is only to bathe with.'(S4 Dom NY +edu) <br> - 'There are companies that sell water that have closed, because of problems with the water they were selling.'(S4 Dom NY +edu) <br> - 'There are trucks that go by and sell water. There's a lot of water, but it's not pure.'(S5 Dom NY -edu) <br> - 'They buy the water because it doesn't reach us there, same as electricity. Water is bad and the children fall in the well.'(S6 Dom NY-edu) <br> c) Would get the device and open a business <br> - 'I would like to open a business to sell the water. I would use it and sell it too.'(S2 Haitians NY +edu) | b) Output is too low <br> - 'One liter per hour is not much. It's good for a house but it's too small for a school.'(S2 Haitians $N Y+e d u$ ) <br> - 'We need more gallons. There are filters that purify water that give more and cost less.'(S2 Haitians NY +edu) <br> - 'Not worth it. I pay 10 cents for this. It's not sufficient water.'(S2 Haitians NY +edu) <br> - 'We need more water. I would not have enough. It's good for two people. That's not enough.'(S3 Haitians NY +-edu) <br> - 'Most families don't have 2 people. Plus, what about the neighbors and friends.'(S3 Haitians NY +-edu) <br> - 'Water is a big problem, but cleaning it is very slow and long process.' (S6 Dom NY -edu) <br> c) Do not like "distilled" water <br> - 'My concern is that it produces distilled water and is not for drinking.'(S2 Haitians NY +edu) <br> - 'The taste (of distilled water) is not the same.'(S2 Haitians NY +edu) <br> d) Do not need it, the solar cooker produces clean water as well <br> - 'Interested but if you have the oven you don't need it.'(S2 Haitians NY +edu) | b) What water shall we put in? <br> - 'How does it work? <br> Where do you put the water? Is it rainwater? '(S1 Haitians NY +-edu) <br> - 'Where do you get the water? From the faucet?'(S3 Haitians $N Y$ +-edu) <br> - 'How often do you put water in it?'(S3 Haitians NY +-edu) <br> - 'Does it work with salt water?'(S3 Haitians NY +-edu) <br> - 'Does it need any chemicals? Would you have to buy water to use this?'(S5 Dom NY -edu) <br> c) Do we need to install plumbing? <br> - 'Is there plumbing that needs to be installed? If you can attach the plumbing it would be great.'(S3 Haitians NY +-edu) <br> d) Where can we install it? <br> - 'Where do you put it? '(S1 Haitians NY +edu) |


| Spontaneous Answers on Pricing: | Comments after knowing the actual price: USD US\$480 |  |
| :---: | :---: | :---: |
| Water Purification System | Positive | Negative <br> a) Produces too little water for that price <br> - 'It's more expensive than the solar cooker and it produces one litter per hour? Not good!'(S2 Haitians NY +edu) <br> - 'I don't think the output is worth the price. Wow...for 5 gallons, that's not worth it. Half a gallon a day? Oh no!'(S2 Haitians NY +edu) <br> - 'At any price I don't think it is worth it. They can easily buy a bottle for very little.'(S2 Haitians NY +edu) <br> - 'Forget that. For one litter? I would rather boil water. You can boil the water faster.'(S3 Haitians NY +-edu) <br> b) Expensive, I would not buy it <br> - 'It's expensive. If it weren't for the price I would have it. I live there all of the time, so it's important for me.'(S3 Haitians NY +-edu) <br> - 'We wouldn't pay that. It's a lot.'(S4 Dom NY +edu) <br> - 'I wouldn't buy it.'(S4 Dom NY +edu) <br> - 'Oh! That's expensive. We'll stick to the large bottles.'(S6 Dom NY edu) |
| \$100/\$200/\$250/\$300/\$400/\$450 <br> (S1 Haitians NY +-edu) | a) It is so important, I would buy it <br> - 'I would buy it because my father got sick with malaria after drinking dirty water...I paid more in medical bills.'(S1 Haitians NY +-edu) <br> - 'Definitely.'(S1 Haitians NY +-edu) <br> - 'Wow! It's very important. I'd pay up to US\$500 for this.'(S5 Dom NY -edu) |  |
| \$100/\$160/\$200/\$250 <br> (S2 Haitians NY +edu) |  |  |
| \$150/\$200/\$150/\$200 <br> (S3 Haitians NY +-edu) |  |  |
| \$50/ US\$150/\$150 <br> (S4 Dom NY +edu) |  |  |
|  |  |  |
| \$150/\$200/\$200/\$540 <br> (S5 Dom NY -edu) |  |  |
| \$200/\$215/\$300 |  |  |
| (S6 Dom NY -edu) |  |  |

B) Solar TV

People were surprised when this product was shown. Participants commented that their families in Haiti and the Dominican Republic like watching TV a lot and that many charge the inverter in order to have their TV hours at night even if there is a blackout. However, when considering this product, Remitters said that its major disadvantage is that the device needs to be charged for six hours in order to be able to watch TV for three hours. Only a few participants per group were able to guess its price correctly. The majority always estimated below the actual cost. After the real price was announced, very few people said that they were still interested and that they would buy it. For the majority of participants a solar TV is not a priority.


| Spontaneous Answers on Pricing: Solar TV | Comments after knowing the actual price: USD US\$900 |  |
| :---: | :---: | :---: |
|  | Positive | Negative |
| $\begin{aligned} & \$ 200 / \$ 250 / \$ 350 / \$ 400 \\ & \text { (S1 Haitians NY +-edu) } \end{aligned}$ | a) I want it fully loaded <br> - 'At US\$900 it's OK because it takes a lot of energy. I would buy it | a) It is expensive: it is a product for "big shots" |
| \$0/\$200/\$500/\$700/\$1000 <br> (S2 Haitians NY +edu) | (50\% of participants) if it comes fully loaded with energy'(S1 Haitians NY +-edu) <br> - 'If it comes fully loaded and I have a guarantee, yes I would buy it. | - 'The majority would not buy it for that price. He would because he is a big shot.' '(S1 |
| \$0/\$300 US\$800/\$1000 <br> (S3 Haitians NY +-edu) | '(S1 Haitians NY +-edu) <br> b) At least, I could guarantee that my family can watch TV | Haitians NY +-edu) <br> - 'It's expensive. We can have a smaller size for less money.'(S2 |
| \$500/\$800/\$900/\$1000 (S4 Dom NY +edu) | - I use a television at home. I want my family to do so too. I would guarantee that my family is at least watching TV.'(S1 Haitians NY +edu) | Haitians NY +edu) <br> - 'Wow that's too much.'(S3 Haitians NY +-edu) |
|  | - 'For the needs of my house, a TV is more important than an oven. You don't need a stove, but on the other hand there are always TV problems.'(S4 Dom NY +edu) <br> - 'If the power goes out, we still get to see our programs.'(S5 Dom NY -edu) | b) It is not a priority <br> - 'Oh no. There's not enough for food, so there's not enough for TV.'(S6 Dom NY -edu) |


| Spontaneous Answers on Pricing: Solar TV | Comments after knowing the actual price: USD US\$900 (continued) |  |
| :---: | :---: | :---: |
|  | Positive | Negative |
| $\begin{gathered} \text { \$800/\$1000/\$1500 } \\ \text { (S5 Dom NY -edu) } \\ \$ 200 / \$ 250 / \$ 300 \\ \text { (S6 Dom NY -edu) } \end{gathered}$ | c) It is great <br> - II would buy it for sure (younger participant who was passionate about it).'(S1 Haitians NY +-edu) <br> - 'TV was the favorite for 4 people, making it the number one choice for the group S4. '(S4 Dom NY +edu) <br> - 'Wow! This is great!'(S5 Dom NY -edu) |  |

C) Solar Water Heater

This product received low grades because participants said that it does not really address a pressing need. Water in Haiti and the Dominican Republic is already hot because 'it comes from the roof' and, if necessary, people can boil water to make it warmer. Remitters also found that the output of the equipment in terms of hot water was low. Other participants, however, said that a solar water heater would be ideal for places in the mountains or in December when it gets cold. They would rather have a heater than boiling water. The prices given spontaneously were, on average, quite close to the actual cost. This is because they associated this product with a regular water heater. However, there were few participants willing to buy one.



### 5.4 Sustainable Energy Products that Best Suit Household Needs

After all the products had been viewed and Remitters were aware of the actual prices and characteristics of each product, the Remitters identified their top choices. In the end, the majority of Remitters indicated that they preferred the cheaper more mobile solar items.

|  | Radio/Flashlight | Solar Lantern |
| :---: | :---: | :---: |
| Most Preferred | - 'It's what we need for Haiti. It's the most popular.'(S1 Haitians NY +-edu) <br> - 'Because I can buy it for many people.'(S1 Haitians NY +-edu) <br> - 'Radio, higher than wood burning.'(for 5 people) (S2 Haitians NY +edu) <br> - 'Radio.' ( 8 people said they would buy it as second option) (S4 Dom NY +edu) <br> - 'Flashlight. It's cheaper. It has light and a phone and radio charger. It's very practical.'(S6 Dom NY -edu) <br> - I like them all. I like the radio a lot.'(S6 Dom NY -edu) | - 'The price is right. We need it a lot.'(S2 <br> Haitians NY +edu) <br> - 'It's portable, light weight, saves money.'(S2 <br> Haitians NY +edu) |


|  | Solar Lighting Kit | Solar Cooker | Wood Burning Stove |
| :---: | :---: | :---: | :---: |
| Sometimes Preferred | - 'Solar Kit. It's a must.' (4 people would buy it as second choice.(S1 Haitians NY +edu) <br> - 'Solar kit.' (6 people would buy it) (S2 Haitians NY +edu) <br> - 'The price is still high. It would be great if it could charge other stuff not just provide light.'(S2 Haitians NY +edu) <br> - 'Solar Panel Kit.' (6 people would buy it) (S5 Dom NY-edu) <br> - 'This one is good because we don't have electricity there.' (6 people would buy it) (S5 Dom NY -edu) | - 4 people would buy it as second choice. (S1 Haitians NY +-edu) <br> - 'The oven can be turned into a machine in case of an emergency. A TV is a luxury.' (S4 Dom NY +edu) <br> - 'There is more of a need for this oven. The oven would save you US\$20-\$30 per month on gas.' (S4 Dom NY +edu) <br> - 'It's wonderful. I like it a lot because I like to cook.' (3 people would buy it as a second choice) (S5 Dom NY -edu) | - 'I liked the cooker.' (S1 Haitians NY +-edu) |


|  | TV | Purification | Water Heater |
| :---: | :---: | :---: | :---: |
| Least Preferred | - 'Water purifier and the TV is a nobody. They cost too much. They are at the end of the list.'(S2 Haitians NY +edu) | - 'Too few gallons per day. Need to improve the technology. '(S4 Dom $N Y$ +edu) <br> - 'My last choice.'(S3 Haitians NY +edu) | - 'This is for people who come from NY. Not for those who live there.' (S3 Haitians NY +-edu) <br> - 'The least favorite, water heater.' (S5 Dom NY-edu) <br> - 'The worst, TV and water heater.'(S6 Dom NY -edu) |

### 5.5 Control vs. Lack of Control over the Use of the Remittance

The original hypothesis was that the longer the Remitters have been away, the more they want to control the money they send home. However, it turned out that the decision about how the money is used is not based primarily on the amount of time Remitters have been away.

When asked about wanting to control the money they send, a large majority of Remitters affirmed that they would not like to control the money they send to relatives and family members. They believe that the money they send is a gift and it is not up to them how it is used. They feel comfortable with the decisions their families make to manage the money received and that their families and relatives in general use it in a responsible way. Once the money is sent, it is up to the receiver to decide how to use it. They believe it would undermine their family's pride if they tried to control the use of the money they send. It also seems that they are afraid to insult their families by telling them how to use the money. Only when the money is being sent to pay for school fees, medical needs or paying rent did they indicate that they would like to have a bit more control; otherwise, they seem to trust how the money is used.

However, some Remitters have found various means to control the money in subtle ways: by paying for school bills directly; by buying a garbage truck on line directly from the manufacturer; by sending a specific remittance to pay rent, mortgages or medicines; by making payments directly to the hospital when someone is sick; or by buying household items for their families directly from a vendor. In addition, some participants stated that they have concerns that their families are not using the money appropriately - for example buying fancy clothes or spending the money on alcohol or on parties - and they feel strongly that they should control the money more.

Remitters are willing to increase control of the money they send in order to ensure that family members can get sustainable energy products. Before the presentation of the sustainable energy products, participants expressed some reluctance about exercising substantial control over the remittances, but there was a change of mindset after they had seen the products. The reason they gave was that otherwise the money would not be used to buy these products. They agreed that providing any of these products would cost them additional money, because they would have to provide these products on top of whatever they are already sending to their families; they said either they needed to increase the amount of the remittance or send additional money for their families to purchase a sustainable energy device locally.

## Remitter's Control of the Money Sent: Do Not Want Control

a) It is not my money anymore; my family should choose how to spend it.

- I send it for whatever they want. I don't care how they spend it. Money goes directly to mom and dad so I want them to use it the way they need.'(S1 Haitians NY +-edu)
- 'We choose to send the money. We would not ask our families how to spend it. No! It's not my money anymore.'(S1 Haitians NY +-edu)
- 'It is a question I would raise with an organization, but not with a family member. When a person calls (asking for money), there is already a reason and a purpose.'(S2 Haitians NY +edu)
- 'I don't care how my mom uses the money.'(S3 Haitians NY +-edu)
- 'I send my mother money for food and for household maintenance, but I wouldn't want to tell her how to spend it. I send her a total of US\$100 per month.'(S4 Dom NY +edu)
- 'I wouldn't want to control them! I just give it to them. I don't know what they use it for, whether for medicine or food. I don't know. I give it as a gift.'(S5 Dom NY -edu)
- 'No, no, no! I give them money so that they can buy what they want.'(S6 Dom NY-edu)
- 'You can't do that. If you give something as a gift, you can't tell them how to use it, and they don't want to be asked.'(S6 Dom NY -edu)


## Remitter's Control of the Money Sent: Do Not Want Control (continued)

b) They depend on us, so we just send money

- 'Our friends who are unemployed do not have Social Security for unemployment. We need to help. I send money to "my beloved son" to my kids three times a year.'(S1 Haitians NY +-edu
- 'I know they use the money for necessities, like food, and shoes but if I control it, then how will they eat? They all depend on us too much.'(S2 Haitians NY +edu)
- 'There is so much to do with the money, that we can't control it.'(S2 Haitians NY +edu)
- 'My mother wouldn't go to a party and misspend it. No, not at all. She knows what she uses it for.'(S5 Dom NY -edu)
c) If money is sent for daily expenses, we cannot control its use
- 'I don't have any control over how they spend the money. For me, in my house, I don't have any control'(S2 Haitians NY +edu)
- 'We are now making a writing contest for children; each child that wins a prize wins a little amount of money. We tell them that it's for books and school related goods but the money could be spent in other ways, like for food. We can't tell them not to feed the kids.'(S2 Haitians NY +edu)
- 'No need to control the money.'(S1 Haitians NY +-edu)
- 'I send money for food... if they don't want to eat then they can buy something else.'(S3 Haitians NY +-edu)
- 'I trust my brothers with the money. I send it for them to eat. I know that's how they are using it.'(S3 Haitians NY +-edu)
- 'I don't blame him, but my brother-in-law uses the money for other needs when they don't have enough, like paying the phone bill or buying shoes for the children.'(S4 Dom NY +edu)
- 'It's used for medicine, and that is controlled because my mother is old and needs it. I know that I send her US\$100, plus what I send for my son.'(S4 Dom NY +edu)
- 'Not priorities necessarily, but if I send money it's because they need it. You send it so that they can buy what they need and for their own expenses like clothes or food.' (S5 Dom NY -edu)
- 'I send it to my mother and it is no longer mine. When I send money it's for a basic need.'(S5 Dom NY -edu)
- 'I trust my family and I want them to use it for whatever they need.'(S6 Dom NY -edu)
d) I don't want to hurt their feelings
'If they ask me for food or hospital bills - you cannot control that. You can hurt the feelings of the people receiving the money.'(S2 Haitians NY +edu)
- I believe that when people send money to relatives the money is used for food, or for school, funerals: basic necessities. How would you do that?'(S3 Haitians NY +-edu)
- 'I send money to my brother for asthma medicine. If he buys alcohol with it and drinks it, that's his problem. If I were to buy the medicine for him, he would get angry.'(S6 Dom NY -edu)
- 'I send money to my parents, and they decide how to spend it. I don't care. It would make them feel bad.'(S6 Dom NY -edu)
e) It would offend my family, it would be rude
- 'They will say: "Next month don't send again".'(S1 Haitians NY +-edu)
- 'Depends on the situation, but the people (Recipients) have their pride. They will not accept control and will not agree to receive money from us with strings attached.'(S1 Haitians NY +-edu)
- 'They would not talk to us anymore. Our families would be offended, and they would never talk to me again.'(S1 Haitians NY +-edu)
- 'Do you want me to kill my son? I won't control the money I send for food!'(S2 Haitians NY +edu)
- 'Everyone, but it's not possible. It's difficult, I would like to do it, but it's not easy.'(S2 Haitians NY +edu)
- 'The family deserves some dignity. If they want to have a party, let them.'(S3 Haitians NY +-edu)
- 'No! Old people are complicated. "Don't send me anything then", my mother would say.'(S6 Dom NY -edu)
f) Cannot control if we are living in New York
- 'Control is about watching what someone is doing with the money we are sending. How can we do it? We are here.'(S2 Haitians NY +edu)
- 'Sometimes I'd like to be in control because my grandmother, I don't know what her problem is, she needs to buy a TV every year. Since she's old and doesn't know how to use the regulators, so when the power goes out, the TV breaks.'(S4 Dom NY +edu)
g) Prices change and my family should decide how to use the money
- 'Oil for cooking, one week it can be US\$10, the next morning the cooking oil can be US\$40. There is really no way to control the money because you can't make a budget for them.'(S2 Haitians NY +edu)


## Remitter's Control of the Money Sent: Wants Some Control

a) To pay school fees and medical needs

- 'If it's meant for education or hospital then, yes we would like control.'(S1 Haitians NY +-edu)
- 'When it's for school, you have to spend it again. Or you can pay directly to the school. That's control right there.'(S2 Haitians NY +edu)
- 'I know that the money I'm sending is going to the university.'(S3 Haitians NY +-edu)
- 'At times we send to school directly. That's how I control the money. I give half of the money to the school and the rest to the family.'(S3 Haitians NY +-edu)
- 'If I send money it's because of needs. If it's for school and they don't spend it that way, then they don't go to school.'(S3 Haitians NY +-edu)
- I have been here for 26 years. I send for my grandparents. I used to send money to a pastor, US\$200 for scholarships for kids, but I never saw a report and they didn't tell me if they got it. '(S3 Haitians NY +-edu)
- 'I send money to three people, I send my cousin (female) US\$50 or US\$100 per month, and I send my goddaughter US\$50 per month, but I want to stop sending her money and instead open a savings account for her for school. That way she will be able to do whatever she wants.'(S4 Dom NY +edu)
- 'If I could have sent the money to the hospital, I would have.'(S4 Dom NY +edu)
b) To pay the rent
- 'I would like to control the payment of rent.'(S1 Haitians NY +-edu)
- 'Yes, for school, rent, medical bills and medication.'(S1 Haitians NY +-edu)
c) By distributing money through a particular person
- 'She breaks it down for my brother, sister, and friends. It depends on who is requesting at the time.'(S2 Haitians NY +edu)
- 'If I'm not in Haiti, my sister runs the business and distributes money I send to 5 people, like US\$2,000-\$3000 Haitian (US\$240-US\$350) at a time, at least 4 times a year.'(S2 Haitians NY +edu)
- 'I send things for everyone in one package and my cousin (female) handles the money.'(S4 Dom NY +edu)


## d) By sending less money more often

- 'The way I control it with my brother is that I send less money twice a month. That way he doesn't spend it all at once. We pay the company and they deliver directly to our families.'(S2 Haitians NY +edu)
- 'The money I send every month is already defined: the first is for rent, the second is for home maintenance. I don't send too much so that they don't use it for anything else.'(S4 Dom NY +edu)
e) By sending food, not money
- 'Give one sack of rice or give them oil. We buy the things and give the food. There is a company that delivers the food. That is a way to control that money. Otherwise they will ask and ask for more. This way we send pre-paid food. We pay the company and they deliver directly to our families.'(S2 Haitians NY +edu)


## Remitter's Control of the Money Sent: Wants Control

a) Family members lie about their needs and they abuse us

- 'Some are abusing us. They tell us that the kids are sick but they are lying.'(S1 Haitians NY +-edu)
- 'Sometimes they ask for school but my brother had already paid for my nephew's school.'(S1 Haitians NY +-edu)
- 'Sometimes they tell you that they are sick...and they are not. They deserve the best but if they tell me that they need a dress I don't like it because I am not taking care of my own needs.'(S2 Haitians NY +edu)
- 'If I don't see results, I stop (sending). I gave to a woman that was paying high rates and helped her to stop borrowing from that person. I lent her the same amount to continue her business. She said she had to use it for something else. She didn't do what I said. So really in the end, I am just giving the money away. '(S3 Haitians NY +-edu)
- 'People claim that they don't have food. There is a commercial in Haiti of a young lady on a pile of mud but she had an IPod on her ears. People like to show off.'(S3 Haitians NY +-edu)
- 'Dominicans have many needs and they all have different expenses. When I tell them how to spend the money, they do it, but sometimes they use it for something else.'(S4 Dom NY +edu)
- 'I would like that, because I know that they don't spend the money the way they say they do.'(S4 Dom NY +edu)
- 'A friend asked me for US\$800 to by a truck. I sent him the money for his business, but he gave it to other people and went to party with his friends, and didn't even thank me.'(S4 Dom NY +edu)


## Remitter's Control of the Money Sent: Wants Control (continued)

b) Younger family members buy unnecessary things

- 'Clothing to show off - to look nice and buy nice things. Teenagers asking for money to be cool. To get cell phones, to buy cars, they waste too much of the money we send.'(S1 Haitians NY +-edu).
- 'I have a niece and I sent her money to pay for school. Three months later she called and told me that she did not pay for it. She bought fancy clothes with the money, so my wife told me not to pay.'(S2 Haitians NY +edu)
- 'My girls are getting older. They tell me that they need books but in fact they are buying nail polish. It is also about the age group. Sending to an adult is different than sending it to a teenager.'(S2 Haitians NY +edu)
- 'Sometimes it's not used for food and the (Recipients in Haiti) are buying fancy clothes.'(S3 Haitians NY +-edu)
- 'The money is used for food, but they all have money for a beer and Johnny Walker, it's a damn crisis.'(S4 Dom NY +edu)
- 'Their priorities are different than mine, but I would like to have a copy of what they need.'(S4 Dom NY +edu).
c) Need to control when money is sent for business or to the bank
- 'For family, I don't want to control; for business, it's necessary to control it. (S1 Haitians NY +-edu)
- 'If you're investing, you need control. If you build a house, yes. You want to tell them how to use the money. But the money I send to them, there is no way to control it.'(S2 Haitians NY +edu)
- 'My money, sure. If I tell them to put it in the bank and they spend it, then I'd have a problem with it.'(S6 Dom NY -edu)
d) Need to control when money is sent to support an organization
- 'With an organization, it's good to control the money. But when we send money to the family, then it's hard to control, it is impossible'(S2 Haitians NY +edu)
- 'For reforestation we make sure that it's not stolen. We are tough about it and make sure that the money is spent that way.'(S2 Haitians NY +edu)
- 'We have agents that visit them to see what the money is being used for. They don't like that we monitor the money, but we want to know if it is being used properly.'(S3 Haitians NY +-edu)
- 'I support an organization, 'One dollar for Haiti'. We monitor the money so that we know what they are doing with it.'(S3 Haitians NY +-edu)
- 'We send money for maintenance for the organization we run in Haiti. We see all of the bills: repairs, gas, and tires.'(S3 Haitians NY +-edu)
e) Need to control when money is sent to pay for community services
'We needed a garbage truck. We checked and looked at the prices. We spent the money by buying the bus directly from the bus company. That is control.'(S3 Haitians NY +-edu)


## After learning about Sustainable Energy Products: Remitter's Control vs. Not Control of the Money Sent



## 6. Models for Linking Remittances to Sustainable Energy Products

Remitter participants were shown slides with different models that would make it possible for them to buy sustainable energy products for their families in Haiti and the Dominican Republic. The first slide shows a basic scheme for linking the remittance to the product. Participants were asked to help in the design of the right hand side of the flow.

This chapter includes comments on all models under evaluation, as well as suggestions for improvement in the models

provided by participants. Most of the discussions focused on two models: the Remitter buys the product directly from the vendor in New York and families receive it in Haiti or in Dominican Republic (Model 6) or the Remitter or Recipient buy the product directly from the vendor in Haiti or in the Dominican Republic (Model 7). These two models allow for direct purchasing - with no transfer agencies or banks as intermediaries - which turned out to be the preferred way of acquiring the products. The next most favored model was one in which the Remitter buys sustainable energy products from the vendor in the home country via a transfer agency (Model 3); participants already had some experience with this type of model, especially in Haiti, and it was the model that gave them closest access to the vendor after the direct purchase models. In general, participants were less interested in taking out a loan or opening a savings account to buy the product, and, given their comments, it seems unlikely that many of them would use the Internet because they are afraid of having their identities stolen.

Whether the item is produced locally - in Haiti or the Dominican Republic - or abroad was not so important to some participants, as long as the goods get to the countries successfully. Some participants indicated that they would prefer items to be produced locally to create jobs and to support economic development. However, others confessed that in their view a foreign item was more likely to be of good quality. If items cannot be produced locally, many would like to see local merchants selling sustainable energy products. Having the products available would make it easy to buy and avoid paying for shipping; they said it would give them peace of mind knowing that they can go to their local store if there is anything wrong with the product.

| Place of Origin of Sustainable Energy Products |  |  |
| :---: | :---: | :---: |
| Haitian product | Foreign product | Irrelevant |
| a) To create jobs in the country <br> - 'We would all like products to be made in Haiti.' (S1 Haitians NY +edu) <br> - 'It would be great if the products were made in Haiti. We want to give jobs to Haiti.'(S1 Haitians NY +edu) <br> - 'If it's produced in Haiti I would love it even more.'(S1 Haitians NY +-edu) <br> - 'These products don't help people, if the product is not being produced in Haiti.'(S2 Haitians NY +edu) <br> - In Haiti would be better. It would produce jobs.'(S3 Haitians NY +edu) <br> - 'The ideal is for Haitians to produce them.'(S3 Haitians NY +-edu) | a) More confidence <br> - I have more confidence in a distributor in the USA. I would get a warranty.'(S1 Haitians NY +-edu) <br> - 'I would like a provider in US (everyone agreed). '(S1 Haitians NY +-edu) <br> - 'Ideally Haitians would make them to create jobs. I don't discriminate but some would rather buy it in a foreign country.'(S3 Haitians NY +-edu) <br> - 'In the US, because here (NY) the company is more responsible. Warranties are good here. It's better to buy it here'.(S4 Dom NY +edu) <br> b) Cheaper <br> - 'Some products are cheaper here. Chinese products are cheaper than American products.'(S4 Dom NY +edu) | a) As long as we get them <br> - 'Since it's a necessity I would still buy them.'(S2 Haitians $N Y$ +edu) <br> - 'If the product is made anywhere, it doesn't matter; but it should be sold in Haiti.'(S3 Haitians NY +-edu) <br> - 'It doesn't matter where it is made. I just want people in Haiti to get the benefit.'(S3 Haitians NY +-edu) |

## Model 1: Remitter Buys Sustainable Energy Product with Own Savings

In this model, the Remitter sends money through a traditional remittance provider in New York - for example a bank or a money transfer organization - to a bank/microfinance institution (MFI) in the recipient country, which puts the money into a savings account that can used to purchase sustainable energy products.

Participants had a mixed reaction towards the savings model. The majority referred to it as complicated and unrealistic. Firstly, Haitian participants said that not everyone in Haiti has a bank accounts not did many Haitians living in New York. Along the same lines, Dominican participants affirmed that saving is not a widespread cultural habit back home. Both Haitians and Dominicans disliked the idea of having to deal with the paper work involved in opening a savings account in their home country; they would rather pay for the product in cash directly from the vendor.
Secondly, they were concerned about whose name the savings account would be in. They did not like the idea of giving someone the power to withdraw the money locally. They said that giving their families access to this account would not meet the purpose because family members could withdraw money and buy something other than a sustainable energy product and they would lose control of the money. They were also concerned about how they would manage an account when they live in New York and the account is back home. Lastly, they criticized what they called the "middlemen" (a money transfer agency or a bank) because of the implied costs; again, Remitters said they would rather buy the product in cash directly from the vendor. A Haitian participant mentioned Fonkoze, an MFI that uses a direct deposit model, where Remitters deposit money directly into their accounts without having to use a wire transfer agency.

Participants that liked the model thought that saving money is a good principle in general. Some thought of it as a layaway system, which is a payment system that many people utilize - in other words they viewed it as a short-term
savings mechanism. A few participants went further with the savings idea and said that they would put $5 \%$ to $10 \%$ of the money they send into a savings account in order to purchase the sustainable energy product.


## Model 1: Remitter Buys Sustainable Energy Product with Own Savings

a) Like the idea of having a savings account

- 'It's a good idea because if the money is in the account I can use it.'(S1 Haitians NY +-edu)
- 'If you're opening the account for that purpose it's OK.'(S2 Haitians $N Y$ +edu)
- 'I would like that because it's a way for them to have what they need.'(S5 Dom NY -edu)
- I would open a savings account and buy the product when I have the amount.'(S5 Dom NY-edu)


## b) It looks like a lay-away

- 'We all like lay-away. I used to buy a lot of things for the house on lay-away.'(S1 Haitians NY +edu)
c) Set aside a percentage in savings to purchase the product
- 'You will need to get an extra US\$10 to buy the product. I would use $5 \%$ to $10 \%$ of the money sent.'(S1 Haitians NY +edu)
'I would use 5\% to $10 \%$ of the money I send home to buy these products.'(S1 Haitians NY +-edu)
a) Through a savings account in Haiti or the Dominican Republic, the Remitter does not control the money anymore
- 'Who will the savings account will be under? I don't' have an account in Haiti but my father has an account in Haiti.'(S1 Haitians NY +-edu)
- 'If the bank is in Haiti, who will be the account holder?'(S2 Haitians NY +edu)
- I have a problem with that. The family can still take the money when they want to, and then I won't have control over the money. They can take the money without me knowing.'(S2 Haitians NY +edu)
- 'You don't have control. They can make the account delinquent when they take the money out and don't let you know.'(S2 Haitians NY +edu)
- I don't want to have a family member to withdraw the money. That's not controlling the remittance. '(S3 Haitians NY +-edu)
- 'I would have to send all the money at once, US\$300, not in payments to a savings account.'(S4 Dom NY +edu)
- 'You can't save. The money in the bank would be taken out in an emergency. They would use the savings account for other things like Christmas or vacation.'(S4 Dom NY +edu)
- 'You would lose control if the name on the account is somebody in the DR. The model doesn't work. It would last two or three days.' (S4 Dom NY +edu)
- I would have to know more. Do I have to manage the account? I'm here. How would I manage the money over there?'(S5 Dom NY -edu)
- 'No, because if I send the money, they won't buy it. I have to send the product in a package from here, a thousand times better.'(S6 Dom NY -edu)
b) Take the middleman (money transfer agency or bank) out. I would prefer to buy it directly from the vendor
- 'My opinion is to eliminate the middleman. That guy is the transfer agency. That way we can save money and I can deposit the money directly in the bank at no cost.'(S2 Haitians NY +edu)
- 'I would open my savings here. I don't want a middle men or a bank in Haiti.'(S2 Haitians $N Y$ +edu)
- 'I want to make sure that my money goes directly to the vendor and that the vendor delivers the goods to Haiti.'(S2 Haitians NY +edu)
- 'I don't like to transfer to a third person. Why not make a direct deposit to the bank. Why use a money transfer?'(S3 Haitians NY +-edu)
- 'Many hands. Too many intermediaries. That would certainly raise costs.'(S4 Dom NY +edu)
c) A savings account means lots of paperwork
- 'For poor people it is not good. Poor people want to get their money when they need it" '(S1 Haitians NY +-edu)
- 'To open an account in Haiti you have to be in Haiti and you need a lot of paper work. .'(S4 HNY +-edu)
- 'For me, I'm not going to open an account. I just use the money and buy it. No. I would like an easier solution. I don't want to open an account in Haiti. I live here.'(S2 Haitians NY +edu)
- 'The model doesn't work. This system isn't used to pay for something.'(S4 Dom NY +edu)
d) People in Haiti do not have access to banks
- 'Bank accounts to do savings and pay like a lay away. This is for us (Haitians in NY), not for poor people because it is difficult for them to access banks in Haiti (many don't have a job).'(S1 Haitians NY +-edu)
- 'I don't like it. Most of the people in Haiti don't have bank accounts. That's a very complicated thing.'(S2 Haitians NY +edu)
- 'Will it be in rural areas? How can someone access it if they live far?'(S3 Haitians NY +-edu)
e) I would rather pay directly with cash
- 'I wouldn't have a savings account to buy these products. I wouldn't send the money in payments to the savings account. I would rather take the money out of the bank and pay for it in cash.'(S4 Dom NY +edu)
'Not me. I would like to buy it and send it myself.'(S6 Dom NY-edu)


## Model 2: Remitter Buys Sustainable Energy Product with a Loan

In this model, the Remitter sends the money through a traditional remittance provider in New York - for example a bank or a money transfer organization - to a bank/MFI in the recipient country, which puts the money into a loan account that can be used to purchase sustainable energy products.

This model is less attractive because Remitters think that loans are expensive and complicated; banks ask for collateral

which they do not have, require lots of paperwork, and interest rates are high. Many said that most products (with the exception of the solar panel) were affordable enough and that they would save the money on their own or buy the products in one lump sum. They also said that gifts should not be covered with a loan. Remitters dislike that a transfer agency and a bank are included in this model because they play the role of middlemen, and as a result the purchase of the energy device ends up costing more money. Some also indicated that they were not comfortable taking out a loan in another country and were not sure how the process would work so that their risks were minimized.

There were some participants who were mildly interested in taking out a loan to buy several products (like multiple solar panel kits) or to purchase a costly item because those are not easy to buy in one lump sum. Some felt it would be better to take out a loan in the US because they believe that the interest rates are lower there;. Others said exactly the opposite: that they would only take a loan from a bank in Haiti or the Dominican Republic because they do not think they could get credit in the US. Finally, there were people who said they would consider taking a loan from the vendor directly, never from the banks.

In sum, participants believe that this would not be a popular model for the general public because not everyone has good credit and a loan would not be easy to secure, irrespective of whether it was in New York, Haiti or the Dominican Republic.

Model 2: Remitter Buys Sustainable Energy Product with a Loan
a) I would get a loan to purchase several products ...

- 'If you were buying a number of them in bulk then selling them- then I would get a loan. (this person is thinking of buying and reselling as a business idea).' (S1 Haitians NY +-edu)
- 'If we were buying one unit I would not take a loan but if we bought 10 for our association, maybe we would think about a loan, if the conditions were good for us.'(S2 Haitians NY +edu)
b) Or to buy an expensive sustainable energy product
- 'I would like for it to be with credit. If I want to install the expensive panels, I can pay for them little by little. '(S4 Dom $N Y+e d u)$
- 'I would pay US\$200-\$300 per month, so I would pay it off in years if I bought a panel that costs US\$6000.'(S4 Dom $N Y$ +edu)
- II would take out a loan to buy the water purifier.'(S5 Dom NY-edu)
a) Loans are expensive and complicated: banks ask for collateral, paperwork, high interest
- 'I don't want to pay interest rates on a loan. I will save the money and buy it at home.'(S3 Haitians NY +-edu)
- 'Not a bad idea but the bank will charge interest and require collateral. The bank wants to know how they get their money back.'(S1 Haitians NY +-edu)
- 'No liquidity, no loan. We would be interested. But the bank might not give us a loan.'(S1 Haitians NY +-edu)
- 'The loan will cost too much.'(S1 Haitians NY +-edu)
- 'There are all those fees behind those loans.'(S2 Haitians NY +edu)
- 'I don't deal with those things. If I want something for US\$500, I save my money and then I pick it up.'(S2 Haitians NY +edu)
- 'Same problems and more complicated. I don't like it. The loan will have to be made to us? It's not practical.'(S2 Haitians NY +edu)
- 'We are here to save the money. We won't take a loan and pay interest to buy it.'(S2 Haitians NY +edu)
- 'No loan at all. You have to pay interest on the loan. I like lay-away.'(S3 Haitians NY +-edu)
- 'The amount that the bank charges are very high and the amount is set, so it's no good for me.'(S4 Dom NY +edu)
- 'It's complicated. I don't like credit. I'm trying not to ask for loans.'(S4 Dom NY +edu)
- 'I don't want a loan, but installments would be good that way they don't charge interest.'(S6 Dom NY -edu)



## Model 3: Remitter Buys Sustainable Energy Product from a Vendor in Haiti/the Dominican Republic via a Transfer Agency

In this model, the Remitter selects from among a range of sustainable energy products made available through the transfer agency website or retail outlets. The MTI has contracts with specific energy vendors who, once the item has been purchased, delivers it to the client. Remitters received this model more enthusiastically precisely because the product is bought through a more direct process. Haitian participants associated this flow with a system that is already being implemented by institutions like CAM and Fonkoze, so having something similar was attractive because they said that it is a proven system. Instead of sending money, they pay for a product that is delivered locally. Some Haitian and Dominican Remitters like that the product gets to their countries of origin safely and that storage for the product is provided while the family picks it up. These people felt it was more secure than sending the product themselves or sending money to their relatives to purchase the product. They also noted that it allows significant control of the remittances. Still, there were people who thought that there is no need for including the transfer agency in this process. These people believe that the transfer companies will not provide the service for free, and they would rather buy the product directly and negotiate a good price with the vendor. They also showed concerns about the reliability of the delivery process of the product locally.
Model 3. Remitter buys sustainable energy
product from VENDOR in Haiti/DR via
TRANSFER AGENCY

- Transfer Agency makes payment to Vendor
in Haiti/DR in one lump sum.
- Vendor in Haiti/DR gives product to family.

| Model 3: Remitter Buys Sustainable Energy Product from Vendor in Haiti/Dominican Republic via Transfer Agency |  |
| :---: | :---: |
| Like | Dislike |
| a) Buying the product is more direct, there are less hands <br> - 'This is the same as the first one (model with the savings account option) but easier.'(S2 Haitians NY +edu) <br> - 'We just send the money and you bypass the bank. It's good. The best so far.'(S3 Haitians NY +-edu) <br> - 'I like this process since there aren't too many hands. It's like paying in cash.'(S4 Dom $N Y$ +edu) <br> - 'It's good. With the agency I can pay in installments.'(S6 Dom NY-edu) <br> b) This model sounds super! The product gets there safely and is stored till my family picks it up <br> - 'Super idea! The money is safe and the product will get there.'(S1 Haitians NY +-edu) <br> - 'Vendor will deliver? That's very interesting. The promise to me is that you would have the storage there.'(S2 Haitians NY +edu) <br> - 'It's easy. Quick, and has been established. And you make sure that the family gets it.'(S2 Haitians NY +edu) <br> - 'The money can get lost with the person that you send it with. Here you buy the product and it is delivered to the family's home. It's the best model.'(S4 Dom NY +edu) <br> - 'If you don't trust them (the person you are sending the money to), this is the best model.'(S4 Dom NY +edu) <br> c) Fonkoze and CAM in Haiti offer something similar. It is a proven system <br> - 'That's good. Fonkoze has something like this.'(S3 Haitians NY +-edu) <br> - 'We have a working system like CAM to pay for rice but instead you would pay for the product. Then CAM would deliver it. That's ideal.'(S2 Haitians NY +edu) <br> - 'Keep it this way. It is proven. You wire the solar panel, not the money.'(S2 Haitians NY +edu) <br> - 'The vendor delivers to my family in Haiti. That's what we all want. It's a proven system.'(S2 Haitians NY +edu) <br> - 'If the agencies have a distribution, then that would be OK. Organizations at the level of CAM or Fonkoze have a distribution in Haiti.'(S3 Haitians NY +-edu) | a) Again, take the middleman out of the process to avoid fees <br> - 'No. I'm looking for something better. I'm not letting the middlemen in. I want the middlemen out. It is best that the money goes to the vendor directly.'(S2 Haitians NY +edu) <br> - 'You still have to pay fees; no one is doing it for free. The only difference is that the middle man is in Haiti not here.'(S2 Haitians $N Y$ +edu) <br> - 'Does Fonkoze have a fee for doing that? I think that there could be a fee. Do you bypass the agent? No!'(S3 Haitians NY +edu) <br> b) Does not allow me to negotiate a good price with the vendor <br> - I'm not convinced. It's a lot of hassle. I would rather negotiate here in NY. I buy it, and they install it there.'(S4 Dom NY +edu) <br> - 'If my uncle can negotiate in Santo Domingo that would be better. You can't negotiate with the supplier from here.'(S4 Dom NY +edu) <br> c) I wonder how they deliver the product locally <br> - 'The vendor is in Haiti? How can they deliver the material? Remittance agencies deliver money, but they won't take care of the products.'(S3 Haitians NY +-edu) <br> - 'I don't know about that. I only know how to send money or flowers.'(S6 Dom NY-edu) <br> - 'Is it like a remittance that you send a product instead of money?'(S6 Dom NYedu) |

## Model 4: Remitter Buys the Product through an Association in New York

In this model, the Remitter purchases a sustainable energy product from an energy company but the interface is the website of the Hometown Association. The Hometown Association vets the various energy partners before agreeing to advertise their products and takes a small fee for providing the service. In this model, the backend is provided by the MTI.

The concept of buying sustainable energy products through an Association of Haitian or Dominican people living in New York was a bit foreign for the majority, and was attractive mainly to people who were part of an Association already and with quite specific conditions. Many participants said they would only consider it if they were given an extremely
good deal. They argued that the best case scenario for this model would be that an alliance between a vendor and an association should result not only in lower product prices for members, because the association was buying in bulk, but also in payment alternatives, product guarantees, and the ability to see the products displayed locally at the association. If it offered these benefits, then the association would be taking care of its people in the US and abroad.


Nevertheless, some people showed anxiety about making financial transactions or purchases through an association, unless the products were truly discounted. They raised the issue that the buying process could get longer and confusing and participants felt that the associations should not get into business ventures; they believe that some people (members or not) might take inappropriate advantage of money related issues. Lastly, several Dominican Remitters pointed out that few immigrants are members of associations so this model was not so appealing to them. Participants were also asked if they would like it if the associations displayed the products on their websites. Remitters showed little interest in websites, but insisted that they would rather go to a store to see and buy the products directly.

## Model 4: Remitter Buys Product through an Association in NY

a) An alliance between Vendor-Association should result in lower prices for members

- 'I think it would be a good way to go if the people are efficient.'(S2 Haitians NY +edu)
- 'The Association would need to have an agreement with the vendors. Then, the Association can negotiate a discount for its members.'(S2 Haitians NY +edu)
- 'The vendor might charge, but the Association can negotiate a good rate and give us a discount. It would be a good alliance.'(S2 Haitians NY +edu)
- 'It might bring the price down if they buy in bulk. I want to see it work, have the products demonstrated.'(S3 Haitians NY +-edu)
- 'It depends on what the Association is getting out of it and what they are giving me. Will they pass the discount to us? That would be good.'(S3 Haitians NY +-edu)
b) The Association should offer payment alternatives, guarantees and other advantages
- 'If the Association doesn't offer me an advantage or benefit, I wouldn't do it. The product would have to be cheaper, safer, and the consumer would have to have benefits.'(S4 Dom NY +edu)
- 'I know a group that has insurance and banking products. There are a thousand women in that association and they have advantages and get cheaper products.'(S4 Dom NY +edu)
- 'It would work if the Association gives product and payment alternatives or possibilities.'(S4 Dom NY +edu)


## c) The Association becomes a facilitator

- 'It's like the Association is going to replace the middlemen. The Association becomes the facilitator.'(S2 Haitians NY +edu)
- 'I need a discount, like at BJ or at Costco - they give me a discount when I buy from them because I'm part of a "club".'(S4 Dom NY +edu).
d) Association will be more engaged with Haiti
- 'Benefit is that the Association will help their people and it will encourage people to come to the Association and to work for the country.'(S2 Haitians NY +edu)
- 'I like the Association. I feel that I would be helping two causes. Killing two birds with one stone.'(S3 Haitians NY +-edu)
a) Too many intermediaries; the process gets long and confusing
- 'No! They will charge a fee but it might be less than the other middlemen. As for me, I would prefer to buy it from the vendor.'(S2 Haitians NY +edu)
- 'Directly from the vendor. Too many actors are involved. It would be confusing and the process would be delayed.'(S2 Haitians NY +edu)
- 'I say no. Too many middlemen. What is the purpose of the association? To validate the vendor?'(S3 Haitians NY +-edu)
- 'Like a cooperative? It doesn't appeal to me. It has to go through too many hands, it's a long process and nobody knows what's going on.'(S4 Dom NY +edu)
- I prefer when there are fewer intermediaries. If I can by it directly from the vendor over the Internet, I prefer that.'(S4 Dom NY +edu)
- 'Eliminate the transfer agency, and you get the product at a better price.'(S4 Dom NY +edu)
- 'That doesn't sound good. That group thing sounds fishy to me.'(S5 Dom $N Y$-edu)
b) Distrust towards the effectiveness and responsibility of the Association in this process
- 'It might take too long but it depends on the effectiveness of the association.'(S2 Haitians NY +edu)
- 'The association would also have to be responsible for the orders and its deliveries. If the association is not efficient, it will be worse.'(S2 Haitians $N Y$ +edu)
- 'Who is the association? Like our federation?'(S2 Haitians NY +edu)
- If I'm going to use it, I will investigate the association to see how they work. I would find out how many people have used the organization and I would ask about it to see if it will work.'(S2 Haitians NY +edu)
- 'What type of association is it? If it helps people in Haiti I would use them. I would not buy (through an association) it if it does not benefit people in Haiti.'(S3 Haitians NY +-edu)
- 'It depends on the association.'(S3 Haitians NY +-edu)
c) An Association should keep away from doing business
- 'Someone can claim to be a member of an association and people can take advantage or abuse the association.'(S2 Haitians NY +edu)
- 'I don't want to go into business as an association. I don't mind displaying the goods as an association but I don't want to go into business.'(S2 Haitians NY +edu)
- 'The federation can facilitate to help them take the orders, help them go on line, to facilitate the purchase of the goods but we don't want to go into the business.'(S2 Haitians NY +edu)
d) Not everyone belongs to an Association
- 'No. I only know the parent's association (at my children's school).'(S6 Dom NY -edu)


Model 5: Remitter Buys the Product Directly from a Vendor in Haiti/the Dominican Republic via the Internet


In this model, the Remitter purchases a sustainable energy product directly from an energy company but the Remitter chooses the energy device on the Internet and pays either using a prepaid card or a credit card. Buying products online is unfamiliar to a large majority of Haitian and Dominican participants in New York. Earlier in this report (Chapter 2), people expressed many negative opinions about the use of the Internet in general and about money transfers in particular. The major reasons are that people are unfamiliar with the Internet, do not have access to a computer or are afraid of someone stealing their personal and credit information.

However, it is interesting to note that the idea of being able to buy directly from the vendor made several participants want to try buying these products on-line. The reason is that they find that other models have too many middlemen involved, whereas this model allows them to buy directly on-line from the vendor with no fees involved. They said that it might also lower the price of the items, since there is more competition on-line. Another advantage is that the model allows Remitters to exercise real control over the remittances by buying the product themselves without having to have a conversation with their families about the use of the remittances. They expressed concern that sending the remittance with instructions to buy something might offend their families. The few participants familiar with the Internet added that buying on-line is faster, convenient and allows tracking of the product. Some concerns arose about the vendor's reliability, whether shipping costs will be covered, if there is a guarantee on the product, and who will explain how the product works. In sum, on-line buying is still not common among Haitians and Dominican Remitters and is even less common for their families abroad.

This model also tested two different payment alternatives: lump sum or installments. In general, Remitters confirmed that the attractiveness of both options depended on the price of the item and the number of products being purchased, but preferences were fairly evenly divided. Those who would rather pay in a lump sum indicated that it saves future headaches with payments and concerns about delivery times. Of these people, some said they would rather pay in full using a credit card. On the other hand, those who would be willing to pay through small installments said that they want their families to obtain the merchandise quickly before the payment is completed in full. They referred to the fact that because of the financial crisis, merchants are changing the way they do lay-aways, and now they give you the product even if you have not finished paying for it. Others noted that retailers, like Macy's and Sears, will deliver the product upfront even if it is not fully paid for. There was also a group of people who would still prefer lay-away even if the product is not delivered upfront.



| Lump Sum |  |
| :---: | :---: |
| a) |  |

a) Even with lay-aways, the product needs to be delivered upfront

- 'One shot. Not in payments. The culture is that for a special occasion, we give them the gift.'(S2 Haitians NY +edu)
- 'I know companies that do that and they don't have fees.'(S1 Haitians NY +-edu)
- 'Will they deliver before full payment? I want to get the product up front.'(S3 Haitians NY +-edu)
'I want to get the product upfront but I want to pay in installments.'(S3 Haitians NY +-edu)
'I will not use it if the products are delivered at the end when payment is done.'(S3 Haitians NY +-edu)
- I like having the product immediately.'(S4 Dom NY +edu)
- 'Nowadays, with the crisis, even the merchant has to change the way they do lay-away. Now they give you the product even if you haven't finished paying for it. '(S4 Dom $N Y$ +edu)
- 'You go and buy it and take it home, like at Macy's and Sears. They give you the product even if you haven't finished paying for it.'(S6 Dom NY -edu)
- 'We like to receive the product and to continue paying for it little by little.'(S6 Dom NY-edu)
b) I prefer lay-away even if the product is not delivered upfront
- 'It's like lay-away.'(S3 Haitians NY +-edu)
- 'Well, for someone who doesn't have much income, it's feasible because there are people that can't pay in one payment.'(S4 Dom NY +edu)
- 'Because of the economic difficulty, the lay-away system is being used a lot.'(S4 Dom NY +edu)
- 'The one with payments is better because it can be used by more people.'(S4 Dom NY +edu)
- 'I would buy it in two payments. I would like the one that's US\$35 but I would pay it in installments.'(S6 Dom NY-edu)
- 'I don't like to owe, but I prefer installments if I don't have enough.'(S6 Dom NY-edu)
- 'I would like it in installments, even though I know that you don't get the product until you've made the final payment.'(S6 Dom NY -edu)


## Model 6: Remitter Buys the Product Directly from Vendor in NY/US and Family Receives it in Haiti/the Dominican Republic

In this model, the Remitter purchases a sustainable energy product directly from an energy company based in New York that delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.


Direct buying and direct delivery is what makes this a very appealing model. By buying the product directly in New York, Remitters see the product themselves, and understand how it works. According to a Dominican participant, the product is cheaper in the US because of high taxes in the Dominican Republic. With direct delivery, the vendor takes care of shipping and what it entails: costs, custom hassles, storage of the product while Recipients pick it up or while the vendor sends it, and the vendor is responsible if the product is damaged in transit.

Many participants indicated that they would only prefer this model (as opposed to buying the product from a vendor in Haiti or in Dominican Republic, Model 7) if the vendor in New York delivers the product directly to their families. They do not want to deal with the actual problems and costs associated with sending products (shipping and customs). They indicated that the vendor would need to have a distribution center in Haiti or in Dominican Republic in order to distribute the products.

However, some participants felt that this model would increase the price of the product. They agued that there is no way that the vendor will assume all delivery costs: 'This will add an extra expense. They (vendors) are not here for fun; they are here to make money.' 'Are the vendors going to deliver in Haiti at the same US\$40?'

## Model 6: Remitter Buys Product Directly from Vendor in NY/USA and Family Receives it in Haiti/Dominican Republic

a) With direct buy in New York, we see the product, how it works and get the guarantee

- 'The best way for us is to have the product delivered there and we pay for it here. We see the product, pay for it here, we buy it and ask company to deliver in Haiti.'(S2 Haitians NY +edu)
- 'Here the stores carry everything. In Haiti they don't have that.'(S3 Haitians NY +-edu)
- 'I save my money, I see the product, and I buy it, period.'(S5 Dom NY -edu)
- 'I prefer buying it here and sending it. That way I can see it and see how it works and the guarantee works if I buy it here. (S6 Dom NY -edu)
- 'I know what they're like over there. You send them money for one thing and they buy something else. If I send them the money, they wouldn't buy it. I buy it here, pay for it and send it like I send the boxes.'(S6 Dom NY -edu)


## b) Vendor takes care of shipping

- 'Pay to the vendor in NY, but it gets the goods there.'(S1 Haitians NY +-edu)
- 'It would also be secure to have the vendor get the product to my family.'(S2 Haitians NY +edu)
- I will keep my receipt and if the product does not get to my family I can get a new one from the vendor. The vendor takes all of the responsibility.'(S2 Haitians NY +edu)
- 'It would be expensive to send it. If you send it yourself you will have to pay customs. I would prefer that the vendor sends it.'(S2 Haitians $N Y$ +edu)
- 'How about DHL? No, they are expensive.'(S2 Haitians NY +edu)
- 'Pay for it here and get it delivered there so our families can get them. They ship it from here to Haiti for us.'(S2 Haitians NY +edu)
- 'I want to pay for it here and have it delivered there that way I don't have to pay for shipping. The person delivers it and teaches them how to use it.'(S6 Dom NY -edu)
c) Vendor takes care of product delivery
- 'Yes! This system is the best! The one where you buy something here (NY) and it's delivered in Haiti.'(S2 Haitians NY +edu)
- 'The vendor in NY will send it to Haiti? If they can send it to Haiti that would be great. I would prefer to pay for it and get it delivered in Haiti (6 people).'(S2 Haitians NY +edu)
- 'I will pay and the vendor will deliver to the door of my family house. Everyone would do it that way.'(S2 Haitians NY +edu)
d) Vendor should have a distribution center in Haiti or in Dominican Republic and family picks up the product
- 'Majority will like to pay in NY and have family pick it up there at the company in Haiti.'(S1 Haitians NY +-edu)
- 'If the vendor has a distribution center in Haiti it is even better because we don't have to deal with delivery or shipping.'(S2 Haitians NY +edu)
- 'Distribution Center is the best idea! That's the one.... We all agree on that!'(S2 Haitians NY +edu)
- 'The other option is that the Vendor has storage in Haiti. You send them the money and they deliver the product.'(S2 Haitians NY +edu)
- 'Will they have the products here to buy them here? I buy product after I see it here. Then, vendor should have a venue in Haiti where my family can pick it up.'(S2 Haitians NY +edu)
- 'I would like to pay it here (NY) and get my family to pick it up there at a distribution center. Companies that are making them should have a distribution center or warehouse there.'(S2 Haitians NY +edu)
- 'I would buy it here and have it delivered there. They can charge me for the shipping and it is picked up over there.'(S4 Dom NY +edu)
e) Can check price lists in USA and Haiti to get the best price
- 'We are here so it's easier to do it here. However, we all have branches of our association in Haiti so it could be convenient to do it in Haiti. We need to check the conditions. '(S2 Haitians NY +edu)
- 'I would look at the list price in the US and then in Haiti and I will check to see which one is lower.'(S2 Haitians NY +edu)


## f) It is cheaper to buy it in USA because of taxes in the Dominican Republic

'In the DR there are customs taxes. Prices are higher than if you buy it here (NY).'(S4 Dom NY +edu)

## Model 7: Remitter or Recipient Buys the Product Directly from a Vendor in Haiti/the Dominican Republic

In this model, the Remitter or the Recipient purchases a sustainable energy technology directly from an energy company that operates in Haiti or the Dominican Republic, and delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.

Direct buying and cost-effectiveness is what makes this a very attractive model. Remitters were told that buying the product directly from a vendor in Haiti or the Dominican Republic could be done in two ways: the Remitter buys it directly from the local vendor or the Remitter sends the money to the Recipient to buy the product from the local vendor.


The major advantage of buying the product from a local vendor as opposed to buying the product from a vendor in New York is cost. Through this model, people are saving on shipping and delivery costs, taxes that need to be paid in the US before sending the item and customs fees in Haiti or in the Dominican Republic when the product is received. These are additional costs that Remitters believe inflate the price of the product. There are many other benefits of buying from a local vendor. First, there are no risks of product damage during transportation. Second, the local vendor can provide product maintenance instead of 'having to ship the products back to US for maintenance.' Third, Recipients can make the guarantee effective locally if the product needs to be replaced. Fourth, the vendor can show families how to install the product and how to use it correctly. Fifth, there is no paperwork or time used on local customs issues.

However, there were some concern about the geographic location and accessibility of the vendor in Haiti or the Dominican Republic. Some families would need to travel to get the product. A Dominican participant suggested creating a system similar to Avon, where micro vendors in small towns could sell the products and make home demonstrations to show how the item works. The person pointed out that this would also increase jobs at home. Many participants of both nationalities strongly supported models that would increase the job markets locally.

## Model 7: Remitter or Recipient Buy Product Directly from Vendor in Haiti/Dominican Republic

## a) Prefer to pay the Vendor directly in Haiti or in Dominican Republic

- I want to pay directly to the vendor in Haiti.'(S1 Haitians NY +-edu)
- 'I prefer the vendor to be in Haiti. They can do a good job. I can pay for it and my family can just pick it up.'(S3 Haitians NY +-edu)
- 'I also like buying directly from the vendor. If there is a store that sells them in Haiti then it would be OK.'(S3 Haitians NY +-edu)
- 'If they sell them in Haiti, yes. We need to cut all of the middlemen. Too many hands are not good.'(S3 Haitians NY +-edu)
- 'I would like to send the money to the vendor to pay for the product and my family picks it up.'(S3 Haitians NY +-edu)
- 'I would buy it there and have it delivered to the family.'(S3 Haitians NY +-edu)
- 'I would buy it directly in Haiti with the vendor. Otherwise I don't know how they will use the money.'(S3 Haitians NY +-edu)
- 'What if the company can open a store in Haiti? That way we can pay the company on line, and all they have to do is deliver the product.'(S2 Haitians NY +edu)
b) Prefer to send the money for them to buy it in Haiti or in Dominican Republic
- 'Who would pay for the shipping? All of these models would not work. It's better to give money to the family than to pay the shipment cost.'(S2 Haitians NY +edu)
- 'The parish had 30 people who bought a solar panel. They gave the money to the priest. Then the parish contacted the vendor and everyone got their system installed.'(S3 Haitians NY +-edu)
- 'No! I would have to know the price, and send the money so that they can buy it over there.'(S5 Dom NY -edu)
- 'I want to be shown the product, to see if it works. I see it here, and then I send them the money through an agency and find a local store.'(S5 Dom NY -edu)
- 'Everything always costs a lot here (NY). I can think of other things I would rather buy.'(S6 Dom NY -edu)


## Model 7: Recipient Buys Product Directly from Vendor in Haiti/Dominican Republic (continued)

c) To save shipping and delivery costs

- 'I would buy it with a company in Haiti. That way I don't have to pay for them to deliver to our families.'(S3 Haitians NY +-edu)
- 'I would like to buy it in Haiti so I don't have to pay for transportation.'(S2 Haitians NY +edu)
- 'I would like it through a vendor in Haiti and delivered in my village.'(S3 Haitians NY +-edu)
- 'The problem is location. What if the store is only in one town? How can my family get it? They need to travel to it.'(S3 Haitians NY +edu)
- 'I buy the product from the vendor in Haiti and have it delivered. It does not have to be built in Haiti but the vendor should be in Haiti.' (S3 Haitians NY +-edu)
- 'If I buy it here, I have to send it to the DR. That would cost me about US\$2000 (\$57) to send. I'd rather buy it there and not have any shipping problems.'(S4 Dom NY +edu)
- 'I would prefer to buy it in the Dominican Republic because that way I avoid shipping costs.'(S5 Dom NY -edu)
- 'You don't have to pay for shipping.'(S6 Dom NY -edu)
d) Save custom fees and paperwork
- 'Do you pay taxes? Not if you buy it in Haiti.'(S2 Haitians NY +edu)
- 'When you buy a car here and pay customs you end up paying more in fees than you pay for the car.'(S3 Haitians NY +-edu)
- 'Too much paper work. I would never advise to send a product.'(S3 Haitians NY +-edu)
- 'Others like to buy the product in NY because they don't know about taxes, and other costs.'(S3 Haitians NY +-edu)
- 'There are a lot of problems for you when buying the product here (NY). In order to get to customs you never know in advance how much they will charge.'(S3 Haitians NY +-edu)
- 'Right now I have stuff (medical supplies) that are rotten because they are stuck in customs.' (S3 Haitians NY +-edu)
- 'If you have to send it to them that will be a problem. You can't take it in your luggage.'(S3 Haitians NY +-edu)
- 'Oh no! It's better to buy it there. Also, when it's there, they can learn how to use it. The problem of customs is eliminated.' (S6 Dom $N Y$-edu)
- 'People don't want to send things because it's expensive and if they find what you are sending you have to declare it and they charge you.'(S6 Dom NY-edu)


## e) The product does not get damaged

- 'I had a bad experience when I sent a TV, hidden, and it broke. To avoid that problem, it's better to buy it there.'(S6 Dom NY -edu)
- 'The product would break by the time it gets to the person receiving it. You may lose the product or it may get damaged on the way.'(S3 Haitians NY +-edu)
- 'Someone bought a solar panel here (in NY), but when it got there it was broken.'(S3 Haitians NY +-edu)
- 'I send the money and they buy it over there. It's dangerous to send it from here. It can get damaged on the way, and I'm responsible.'(S5 Dom NY -edu)
- 'Buy it there because of shipping. There's no guarantee that it will get there without any problems.'(S6 Dom NY -edu)


## f) I can get local maintenance

- I would like to buy in Haiti in a big place. If something is wrong with the product they can repair it. I need a guarantee. That's why I would not buy them (products) here. I need a vendor to service it there.'(S3 Haitians NY +-edu)
- 'When you have a responsible company in Haiti it's better for you because they can fix it there. Imagine, if I buy it in the US, I would have to bring it here to get it fixed.'(S3 Haitians NY +-edu)
- 'As long as they give me good service.'(S3 Haitians NY +-edu)


## Annex 2 : Final Report Recipients

## Focus Groups in New York with Haitian and Dominican Immigrants

## "Financing Sustainable Energy through Remittance Flows in Haiti and the Dominican Republic"

Financed by FOMIN - A Member of the IDB Group

Presented by Arc Finance/BASE

December 2009

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## INTRODUCTION

The ultimate goal of this market research is to determine the feasibility of promoting the use of remittances as a means to purchase clean energy. Two countries have been selected for research, Haiti and the Dominican Republic.

Haiti has the lowest coverage of electricity in the Western Hemisphere, with only about $12.5 \%$ of its 8.9 million population (or 1.1 million people) having reliable access. It is estimated that over 1 million Haitians live in the US with about 400,000 living in New York (these figures include undocumented workers). In 2008, Haiti received about US\$1.8 billion in remittances (which makes up about 20\% of GDP). Haiti has suffered significant political and economic unrest for many years.

The total population of the Dominican Republic is about 9.5 million, with about 3 million people (or about $40 \%$ of the population) living in rural areas that do not have reliable sources of electricity. About 1.2 million Dominicans live in the US with the largest concentration of Dominican immigrants in New York and New Jersey. The Dominican Republic received approximately US\$3.1 billion in remittances in 2008 and, despite the financial crisis, remittances rates have increased by almost 5\%. The Dominican Republic is in a relatively stable political and economic situation at present.

Fostering access to electricity enables substantial improvement in living conditions of the poor and positively influences rural economic development. It provides opportunities to increase income and assets by extending the workday or making the operation of equipment more efficient and effective. It provides health benefits by improving the air quality leading to fewer vision and respiratory problems. It also supports education goals - children and adults can study in the evenings under electric lights. The number of households adopting electricity continues to grow for years after a village first receives electricity. Promoting the use of clean, renewable energy technologies also contributes to the global objective of reducing greenhouse gas emissions. Arc Finance undertook this market research to determine if remittances are a viable source of end-user finance for the purchase of energy products in the developing world. Data was collected in New York during September 2009 and in Haiti and the Dominican Republic during October 2009.

## OBJECTIVES

There were several goals embedded in the research that focused on recipients:

- To assess the level of demand among Recipients in Haiti and the Dominican Republic for sustainable energy products.
- To verify the current situation of the energy supply and demand in Haiti and the Dominican Republic.
- To assess the extent of the receiver's knowledge about sustainable energy products.
- To identify perceptions about the positive and negative aspects of the most frequently used mechanisms to obtain these products.


## METHODOLOGY

$\checkmark$ Focus Groups. This qualitative market research tool is based upon group discussions of a maximum of 12 participants, with a previously defined demographic profile according to the research objective. In addition, each group included participants from different neighborhoods and engaged in a variety of job activities.

Upon arrival at the meeting, the participants were each given a basic information questionnaire, in order to gather specific information before beginning the meeting. People were asked to write down their personal experiences on the subject matter in the questionnaire, which made their verbal expression during the discussion easier.

During the focus group meeting, the moderator led the discussion of topics related to the study based on a Topics Guide. The dynamic of the discussion encouraged participants to fully articulate their opinions in order to identify a rich range of views on the subject. Each session lasted approximately two hours. Though it has no
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statistical value, this qualitative study is very useful for understanding the reasoning that people go through when forming their opinions, attitudes and values.

## $\checkmark$ Socio-demographic Profile of Participants in the Study (including Recipients)

- Countries: The full study took place in three different countries: USA (New York, six groups), Haiti (three groups) and Dominican Republic (three groups).
- Origin: Participants were divided by origin: 1) Haitians in NY (three groups); 2) Dominicans in NY (three groups); 3) Local people in Haiti (three groups); 4) Local people in Dominican Republic (three groups).
- Role. In terms of the research objective, participants were divided into two different roles: 1) Remitters (Haitian and Dominican immigrants); 2) Recipients (Haitian and Dominican relatives and friends). There were six focus groups per role.
- Sex and Age Range: All groups included participants of both sexes, with a balanced number among them. The age range was between 18 and 64 years of age.
- Area. The six groups with Remitters included participants with a family of origin in both urban and rural areas. The six groups with Recipients were held in mostly in the rural area (two groups per country), but there were also groups in urban areas (one group per country) to ensure representation of different country zones. The hypothesis being tested was: "It is more likely that people sending money to rural areas in the home country will be willing to link their remittances with an energy product."
- Education Level: Groups were divided into higher and lower education levels. Since some of the sustainable energy products presented varied in price, it was important to include participants with different education levels as a proxy for income level, based on the assumption that the higher the education level, the higher the income level was likely to be. The higher education levels included: high school, technician and college (finished or unfinished). Lower education levels included: elementary school and junior high.
- Length of Time Sent/Received Money: Groups were also divided into people that had received/sent money for more or less than five years. Some groups included participants with both characteristics. The team was testing two hypotheses here: "The longer that Remitters have been away, the more they want to control the money they send home" and "The longer time that Remitters have been away, the more likely they are to be willing to link their remittances to a sustainable energy product."

In addition, each group included participants with banking knowledge (measured in terms of participants with varied experience in using banks, credit cards and on-line banking) and prepaid-card knowledge (measured in terms of varied experiences in using gift cards, telephone cards or any other type of prepaid cards). Recipient groups included a variety of participants in terms of quality of electric service, measured in terms of people with or without energy problems, such as blackouts; and in terms of people who were and were not connected to the grid. Recipient focus groups always included people who received money from New York.

Finally, groups were conducted in four different languages: English (NY Haitian Remitters); Spanish (NY Dominican Remitters and local people in DR); French and Creole (local people in Haiti).

Socio-demographic Profile of Focus Groups

| Session Number | Country, Location, Date | Participants | Origin | Role | Sex and Age Range | Area | Education Level | Time Money Sent / Received |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ \text { (S1 Haitians NY } \\ \text { +-edu) } \end{gathered}$ | Place: Spring Valley, NY Rockland County Date: Sep. 13, 2009 | 12 | Haitians in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | $\begin{gathered} \text { Mixed } \\ \text { (+-edu) } \end{gathered}$ | Less and more than 5 years |
| $\stackrel{2}{(S 2 \text { Haitians NY +edu) }}$ | Place: Brooklyn, NY <br> Date: Sep.20, 2009 | 11 | Haitians in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | Higher (+edu) | More than 5 years |
| $\begin{gathered} 3 \\ \text { (S3 Haitians NY +-edu) } \end{gathered}$ | Place: Brooklyn, NY <br> Date: Sep.20, 2009 | 12 | Haitians in NY | Remitters | Mixed 18-64 years | Urban and rural Recipients | $\begin{gathered} \text { Mixed } \\ \text { (+-edu) } \end{gathered}$ | More than 5 years |
| $\stackrel{4}{(S 4}$ Dom $N Y$ +edu) | Place: Harlem, NY <br> Date: Sep.15, 2009 | 7 | $\begin{aligned} & \text { Dominicans } \\ & \text { in NY } \end{aligned}$ | Remitters | Mixed 18-64 years | Urban and rural Recipients | Higher (+edu) | More than 5 years |
| $\stackrel{5}{(S 5 \text { Dom NY -edu) }}$ | Place: Harlem, NY <br> Date: Sep.19, 2009 | 8 | $\begin{aligned} & \text { Dominicans } \\ & \text { in NY } \end{aligned}$ | Remitters | Mixed 18-64 years | Urban and rural Recipients | Lower <br> (-edu) | More than 5 years |
| $\begin{gathered} 6 \\ \text { (S6 Dom NY -edu) } \end{gathered}$ | Place: Wash Heights, NY Date:Sep.22, 2009 | 10 | Dominicans in NY | Remitters | Women 18-64 years | Urban and rural Recipients | Lower (-edu) | More than 5 years |


| $7$ <br> (S7 Haiti North rural) | Place: Ganthier (North) Date:Oct.10, 2009 | 12 | Haiti | Recipients | Mixed 18-64 years | Rural Haiti | Lower | Less and more than 5 years |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (S8 Haiti Centre rural) | Place: Mirebalais (Centre) <br> Date: Oct.12, 2009 | 9 | Haiti | Recipients | Mixed 18-64 years | Rural Haiti | Higher | More than 5 years |
| 9 <br> (S9 Haiti Centre urban) | Place: Hinche (Centre) <br> Date: Oct.13, 2009 | 9 | Haiti | Recipients | Mixed 18-64 years | Urban Haiti | Mixed | Less and more than 5 years |
| 10 (S10 DR StoDom urban) | Place: Sto. Domingo East Date:Oct.7, 2009 | 8 | Dominican Republic | Recipients | Mixed 35-64 years | Urban DR | Higher | Less and more than 5 years |
| 11 <br> (S11 DR South rural) | Place: Bani (South) <br> Date: Oct.8, 2009 | 9 | Dominican Republic | Recipients | Mixed 18-64 years | Rural DR | Lower | Less and more than 5 years |
| $12$ <br> (S12 DR North rural) | Place: Bonao (North) <br> Date:Oct.9, 2009 <br> Time:3pm | 10 | Dominican Republic | Recipients | Mixed 18-64 years | Rural DR | Mixed | More than 5 years |

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## $\checkmark$ Recruiting of Participants

- All sessions were prepared at least one week prior to the focus groups by Arc Finance researchers in New York. Sessions in Haiti and the Dominican Republic included the participation of a local assistant in each country.
- A list of Haitian and Dominican associations in New York was collected and contacts were identified to enable the researchers to invite participants in a personal way.
- In general, people in Haiti and the Dominican Republic were initially reluctant to participate due to the level of mistrust among citizens of both countries. It was important to reassure them that the research team had a genuine interest in understanding the energy situation in their country and that the products to be tested were not for sale.
- All focus group sessions took place in meeting rooms that offered a safe and comfortable environment in order to promote an open discussion.


## $\checkmark$ Structure of the Report

In reading the report is it important to understand the following:

- The report reflects the discussions that took place in the focus groups as closely as possible. This means that the quotes contain colloquial language used by participants and should be understood as such.
- The tables are a means to present quotes in an organized way. The narrative text above each of the tables summarizes the general idea of the quotes in the tables, which are literal expressions given by participants. The narrative is written only after the quotes are organized by the researcher under the best possible heading for the collection of quotes.
- In choosing the headings, the researcher is guided by the data presented by the participants, not by her own perceptions. Headings are given to a set of quotes that refer to the same concept. Some tables include positive and negative aspects of that topic which is where the richness of the report lies.
- Each quote is followed by a parenthesis that refers to the specific group from where that quote originated. When amounts are given in local currency (Dominican pesos and Gourdes), the equivalent in US is included next. The exchange rate used for the currency in Haiti is US\$1=42 gourdes and US\$HT1=5 Gourdes. For Dominican pesos, US\$1=35 pesos.
- The report includes graphs that were drawn from the Basic Information Questionnaires that each participant completed before starting the focus group discussion. They represent the opinions of participants in these focus group sessions, not of the whole population in Haiti or in Dominican Republic.


## MAP AND FOCUS GROUP LOCATIONS: HAITI AND THE DOMINICAN REPUBLIC

A total of six groups were conducted with Recipients. Three of them were carried out in Haiti, in the Northern town of Ganthier (rural), in Mirebalais (rural) and in Hinche (urban) in the Centre region. The other three groups were held in the Dominican Republic in the capital city, Santo Domingo East, in the Southern town of Bani (rural) and in the Northern town of Bonao (rural). These places are indicated in red on the map below; the green marks show other locations Haitian participants come from, and the purple marks show other locations of Dominican participants. This diversity helped to ensure a wide range of opinions during the focus group discussions.


1. Profile of Participants

These graphs illustrate four key profile characteristics (gender, age, income and education) of focus group participants in Haiti and the Dominican Republic. The first one shows that groups included both sexes with a balanced number of men and women, with the exception of the first group held in the Dominican Republic where there was a majority of women participants. The age of participants was spread in ranges; in general, groups included participants from 19 to 65 years of age.



The graphs on income and education levels demonstrate that Recipients, when compared to Remitters, have lower levels in both categories. It is important to note that income ranges for Haiti are different from those in the Dominican Republic. The starting point for both countries is based on the minimum wage. With regards to the education level, the graphs include data on primary, junior high, high school, and university levels. As compared to the education level of Remitters, fewer Recipients have university or graduate degrees.

## Income Level: Recipients

What is your monthly household income?
Percentage


The graphs show the opinions of the participants. They are not representative of the total population.


### 1.1 Activities of Participants

Recipients in Haiti and the Dominican Republic were more likely to be self-employed in relatively low paying jobs, as compared to Remitters. This is because the income and education levels of Recipients were lower than those of Remitters. Jobs included working in construction or subsistence agriculture, sales (clothes, small home appliances or Avon products), services (administering injections, driving, special event decoration), and home-based workers (seamstresses). Other participants said they owned a small business preparing meals, or that they had a beauty salon, an auto part business or a small pharmacy. There were fewer people receiving a salary, but the groups included teachers, a priest, and employees in childcare, beauty salons and hotel maintenance. Other activities were student, housewife or unemployed. Among the Receivers with higher levels of education, jobs included technical skills, and they described themselves as a nurse, upholsterer, electrician, car mechanic, and in agribusiness.

## Self-employed

a) Construction

- I was born and have lived in Mirebalais all of my life. I remarried after my first wife died. I used to travel to Santo Domingo to work but now I am a mason and work in construction.'(S8 Haiti Centre rural)
- 'People living in Boston send me money to manage and work on the building of their homes in Haiti. I charge them for that service.'(S8 Haiti Centre rural)


## b) Subsistence agriculture

- 'I have land outside of Mirebalais that I use for agriculture. I grow rice, bananas, and corn for consumption and to sell when I have extra.'(S8 Haiti Centre rural)
- 'I work my lands and I grow plantain, corn. My uncle sends me money every 6 months, US\$100-200. '(S9 Haiti Centre urban)
- 'I grow vegetables and have two sons that I am responsible for.'(S12 DR North rural)
c) Sell clothes / small home appliances
- 'At times, I sell merchandise like clothes, shoes, and pots and pans to help myself. I have kids and some of them work.'(S11 DR South rural)
- 'I work in commerce buying and selling clothes'(S11 DR South rural)
- I'm a merchant. I sell clothes and lend money. I live with my wife and daughter.'(S12 DR North rural)


## d) Sell Avon products

- 'I take care of my father and sell Avon to earn my money.'(S11 DR South rural)
- 'I sell Avon products and if I don't get paid on time I have to use the money they send me to cover what I haven't been paid.'(S10 DR StoDom urban)


## e) Seamstress

- 'I am a seamstress and a housewife. I have eight children and those that work give me money.'(S11 DR South rural) 'I take care of a child and I mend clothing to earn a little money.'(S11 DR South rural)


## f) Motorcycle and car drivers

- 'I transport things by motorcycle ("moto concho"). I have a 7 year-old daughter and my wife lives in the USA.'(S12 DR North rural)
- I'm a native of Bani. Jobs are rare around here because there are no companies. That is why I own a taxi. We provide for ourselves with our own businesses but we also reach out to our families for help.'(S11 DR South rural)
g) Special event decorator
- 'I do decorations for events and my husband covers the household expenses.'(S10 DR StoDom urban)
h) Give injections
- I worked at a medical office as an assistant but I was laid off. Now, I'm charging 25 pesos ( 70 cents) giving injections; each prescription includes 5 doses (US\$3.60 ).'(S11 DR South rural)
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| Technician | Other activities |
| :---: | :---: |
| a) Nurse <br> - 'I'm a nurse and work for a nutrition program sponsored by World Vision.'(S8 Haiti Centre rural) <br> b) Upholstery <br> - 'I'm an upholsterer.'(S10 DR StoDom urban) <br> - 'I work in upholstery. I don't have children.'(S10 DR StoDom urban) <br> c) Electrician <br> - 'Refrigerator technician.'(S9 Haiti Centre urban) <br> d) Car mechanic <br> - 'I was born here and am the youngest of 4 kids. I'm an IT technician, a car mechanic, and have a BA degree.'(S8 Haiti Centre rural) <br> e) Agribusiness <br> - 'Technician in agribusiness.'(S9 Haiti Centre urban) | a) Student <br> - I'm a second year nursing student from Mirebalais. I am studying in Port-au Prince and travel back and forth during the week.'(S8 Haiti Centre rural) 'Student.'(S9 Haiti Centre urban) <br> b) House wife <br> - 'I am a house wife.'(S12 DR North rural) <br> c) Unemployed <br> - I'm a welder but there is not a lot of work.'(S11 DR South rural) <br> - I'm unemployed but I'm a civil engineer. I receive money from my parents and from my 2 siblings.'(S12 DR North rural) |

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### 1.2 Length of Time Recipients Have Been Receiving Money and Number of People Who Send Them Money

This graphs illustrates that, with the exception of the group held in the Centre town of Mirebalais in Haiti (Session 8), Recipients in both countries have been receiving money for more than five years in general, with most people receiving money for 5 to 10 years.

## Time Recipient Has Been Receiving Money

How long have you been receiving money (remittances) from your family/friends in the United States?


The graphs show the opinions of the participants. They are not representative of the total population.

Many receive remittances from various relatives and friends living abroad - particularly in New York, Boston, Miami; some send money consistently and others send it less frequently. In total, the amount of money received on a monthly basis adds up to a large sum. This was more noticeable among Haitian Recipients, where the pattern is to have a couple of fixed Remitters plus three to five additional people that send remittances to them 'on certain occasions.'

| Time Recipient Has Been Receiving Money | Number of People from Whom Recipient Receives Money |
| :---: | :---: |
| a) For more than 5 years | a) Constantly and from several people living abroad |
| - 'My relatives living in Canada, Boston, and Miami have been sending money for more than 10 years.'(S8 Haiti Centre rural) | - I receive money from various people twice a month: family, friends, and a business partner but the amount is not constant, it ranges from US $\$ 200$ to US $\$ 600$. The money comes from NY, Connecticut and Miami.'(S7 Haiti North rural) |
| - 'My sister-in-law has been sending US\$100 to US\$200 per month through Caribe | - 'Two or three people send me money but I can also say five but it would not be accurate because it varies all the time.'(S7 Haiti North rural) |
| Express for 5 years for shopping and I help my husband pay for expenses.'(S12 DR North rural) <br> - 'My wife has been living abroad for 8 years | - 'My brother and sister also send me money from NY and Boston and my friend sends from Canada on certain occasions. Everyone sends me something but my cousins and uncles are the ones that send it to me on a more regular basis.'(S8 Haiti Centre rural) |
| but comes every year on vacation. I have 2 children that I am responsible for.'(S12 DR North rural) | - I have relatives in NY, New Jersey, and France that send me money. My cousins send me money every month but my friends only send three times a year. My mother used to be the recipient but now l'm the one getting it.'(S8 Haiti Centre rural) |
| - 'She sends me money every 20 days, but as soon as I have it in my hands, I spend it. She has sent it for 13 years. She is the only one I have but I wish I had many like her!'(S12 DR | - 'My nieces send me US $\$ 200$ to US\$400 every two months. I have people in the Bronx, Pennsylvania, and Boston. When they come, they stay with me. Sometimes they get together and send me US $\$ 700$ to US $\$ 1000$ between all of them if I need something.'(S10 DR StoDom urban) |
| North rural) | - 'A friend and one of my brothers send me money from the Bronx |
| - 'My father and my uncle live in NY. I've been receiving US $\$ 300$ every 2 weeks for five years and I pay for household expenses with that and for the children's school.'(S12 DR | My friend sends it through Western Union for me to buy things for his mother such as milk and food and pay her electric bill.'(S12 DR North rural) <br> b) Not constantly, but from several people living abroad |

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| Time Recipient Has Been Receiving Money | Number of People from Whom Recipient Receives Money |
| :---: | :---: |
| b) For less than 5 years | - 'It's difficult for me to give you an actual number of people who send me money because sometimes my friend who forgot about me for years sends me money.'(S7 Haiti North rural) |
| - 'My uncle and aunt have been sending me money from Queens and Brooklyn for 2 years ever since Fonkoze opened. Sometimes my friends also send me money but not on a regular basis.'(S7 Haiti North rural) <br> - I have an aunt and uncle that sent me money once a year for the past 3 to 4 years.' (S9 Haiti urban) | - 'Five people send me money: my sister, uncle and aunties from Boston, Miami, and NY.'(SO Haiti Centre urban) <br> - 'My sisters send me money from Europe every month. They organize themselves and one will send me money one month, and the other the next. The one in Switzerland sends in June, and the one in Spain sends in July.'(S10 DR StoDom urban) <br> - 'I receive money from my parents, my two siblings and sometimes my cousins. There are a lot, but a few send me money regularly. My parents send me between US\$50 and US\$100 depending on what they can afford. I spend it on the house and the children's school.'(S12 DR North rural) <br> - 'Occasionally my aunts, my godparents and my cousins. About ten people send me money. One of my brothers and my mother send between US\$150 and US\$300 regularly.'(S12 DR North rural) |

### 1.3 Amount and Frequency of Money Received

A monthly remittance was the most commonly cited frequency for receiving money, with amounts varying from less than US\$100 to US\$300. The graph illustrates that average amounts sent by participants in each of the groups ranges from US\$105 to US\$435 monthly.

## Amount and Frequency of Money Received



The graphs show the opinions of the participants. They are not representative of the total population.
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Some Recipients said that they are sent money more than once a month; for example, some receive money weekly in amounts that vary from US\$10 to US $\$ 300$, or every two weeks in amounts of US $\$ 50$ to US $\$ 200$. Others said they receive regular remittances every two to three months with amounts varying between US\$50 and US\$300. The less common cases were the participants who received money on a sporadic basis.

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| Every 2-3 Months | Not Frequently | Amount on a Yearly Basis |
| :---: | :---: | :---: |
| a) Every $\mathbf{2}$ months, between US\$50 and US\$300 <br> - 'I receive between US\$50 and US\$200 from my sister and brothers in New Jersey and NY. The amount varies and so does the frequency. It can be monthly or every other month, depending on their ability.'(S7 Haiti North rural) <br> - 'My aunts and cousins living in Boston send me US\$200 to US\$300 every 2 to 3 months when I need to pay the university. The amount depends on the number of credits I'm taking at school.' (S9 Haiti urban) <br> - 'My father and my sister send me money every two months. My father sends US\$100 this month, the following month it will be my sister who sends US\$50 or US\$100. They alternate.'(S9 Haiti Centre urban) <br> - 'I have an aunt and a cousin who send me money. They send me money every two months, US\$100 but sometimes US\$50 or US\$75 for food or for personal things.'(S10 DR StoDom urban). <br> - 'My father sends me US\$50 or less every two or three months. It doesn't last long! I spend it on the salon, or something to eat, or on a blouse.'(S10 DR StoDom urban) <br> b) Four times a year <br> - 'I have an uncle and three aunties living in NY and D.C. that send me money 4 times a year for the past 4 years.'(S8 Haiti Centre rural) <br> - 'If I'm sick or if I need something they send me money every other month, but three months can go by without them sending anything.'(S10 DR StoDom urban) <br> - I have a brother that sends me USD\$100 every three months from NY. My son sends me US\$50 from Boston every month.'(S11 DR South rural) <br> - My aunt and uncle sometimes send me money every three months. But if I need more, they send it.'(S12 DR North rural) | a) Few times a year <br> - I have a lot of friends abroad. They send when and what they can a few times a year, but it's not often or much'.(S7 Haiti rural) <br> - 'They're all cheap, they're mean. They only know me when they come here. When they leave, they don't know me anymore.'(S10 DR StoDom urban) <br> - 'The situation here is expensive. Now I don't receive anything. I used to withdraw from the bank when my daughter needed something and I'd send what I saved, but I can't anymore.'(S12 DR North rural) <br> b) Every 6 months, between US\$50 and US\$200 <br> - 'I receive US\$50 to US\$100 every 6 months from my cousins who live in Boston.'(S9 Haiti Centre urban) <br> - I'm a mother of three kids and they send for me to pay the school. My uncle sends me money every 6 months, US\$100-200. '(S9 Haiti Centre urban) | a) Less than US\$5,000 a year <br> - 'I get US\$1000 US\$1500 a year.'(S8 Haiti Centre rural) <br> - 'My friends in Canada send for no real occasion US\$200 to US\$100 a year for me.'(S9 Haiti Centre urban) <br> b) More than US $\$ \mathbf{5 , 0 0 0}$ a year <br> - 'On average 6,000 a year.'(S8 Haiti Centre rural) |

### 1.4 Items Received Other than Money

Recipients added that Remitters also support them by sending boxes with housewares, clothes and shoes, food and items to sell.

| Items Received |
| :--- | :--- |
| a) House ware |
| $-\quad$ 'My wife usually sends me a box. Television, music equipment, clothes, she puts it in a box and sends it like that.'(S12 DR North rural) |
| - I receive boxes and in the 7 years I've never lost anything. I trust the agencies, but as long as it's a good one.'(S12 DR North rural) |
| - 'The only way I like to receive electrical appliances, is if they are sent second hand.'(S12 DR North rural) |
| b) Clothes |
| - 'I have a sister that sends me clothes and shoes from NY.'(S10 DR StoDom urban) |
| c) Items to sell |
| - 'They send me clothes or merchandise to sell instead of money.'(S10 DR StoDom urban) |

### 1.5 Country from Which Money Is Sent

Most Recipients receive money from several people, including regular as well as occasional Remitters. Money coming from the United States is sent from family and friends most of whom are living in New York, Boston, Miami (for Dominicans) and New Jersey (for Haitians), with smaller numbers of senders from Missouri, California, and other parts of the country.


Other countries that Recipients mentioned receiving money from include Canada, France, Germany, Italy, Spain, Sweden, and the neighboring islands. Haitians mentioned receiving money from family and friends in the Dominican Republic.

## Receive from ONE Country

a) From Boston, New York, New Jersey, Orlando, Puerto Rico

- 'Cousins, an aunty, and godfather living in Boston and Orlando that send me money regularly.'(S8 Haiti Centre rural)
- 'I receive money from my uncle who lives in NY and from my brother in law that lives in Boston. They both send me money 3 to 4 times a year.'(S8 Haiti Centre rural)
- 'My cousins and my sister-in-law send me money 4 times a year from Boston and Orlando.'(S8 Haiti Centre rural)
- 'My mother is ill and my brother in Puerto Rico sends us US\$100 every month for her medicine. It's not enough, but it helps.'(S10 DR urb)
b) Only from New York, USA
- 'My friends from Spring Valley, NY send sometimes. Normally when I need the money and I ask for it.'(S7 Haiti rur)
- 'My friends send me money three times a year from NY.'(S8 Haiti Centre rural)
c) Only from Boston, USA
- 'My cousins living in Boston are my closest relatives and the ones that send me money on a regular basis.'(S8 Haiti Centre rural)
- 'My husband lives in Boston and sends me money every month for the cable, telephone and electric bill. It used to be every two weeks.'(S10 DR urb)
d) Only from Florida, USA
- 'Every two months I get money from my uncle and auntie who live in Florida.'(S7 Haiti North rural)
e) From Dominican Republic
- 'My sister living in Santo Domingo sends me 5000 Gourds (US\$125) twice a month.'(S7 Haiti North rural)


## Receive from TWO or More Countries

a) USA and France

- 'My friends send from New Jersey, NY and Paris. It's not a set amount and they send when they want.'(S7 Haiti North rural)
- I was born in Mirebalais and have family that lives in the US and France. I receive money regularly from my brother who is a doctor.'(S8 Haiti Centre rural)


## b) USA and Canada

- I have a cousin in Miami and one in Canada that send me money times a month. One sends me money two times a month the other sends but on a less regular basis.'(S8 Haiti Centre rural)
c) USA and Saint Martin (Caribbean)
- 'I receive from my brother who lives in St. Martin and friends from New Jersey and Brooklyn. They send money every three months.'(S7 Haiti North rural)
d) USA and Dominican Republic (Caribbean)
- 'My friends in Santo Domingo and my family in Miami send me every other month, but the amount is not stable.'(S7 Haiti North rural)


## e) From three countries

- 'I receive remittances from Spain, Sweden and Germany.'(S10 DR StoDom urban)
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### 1.6 Use of the Money Received

The Recipients described uses of the money sent to them as being divided between 'uncontrolled' and 'controlled.' The most common is 'uncontrolled' use of the remittances, which in most cases means funds are allocated to daily household expenses and cover everything from food, medicines, school and utilities, to rent. Not only does it complement household income, but many participants referred to the remittances as being their main income support. Some Recipients assign a large proportion of the money received into paying for energy (electricity and gas) or into investing in their own businesses. They explained that they make these decisions based on the flow of money or on the amount of their electric or other utility bills, and they adjust the amount spent accordingly. Others spend their money freely on personal needs. A less common, but still significant category of uses is 'controlled' uses of the money. Receivers explained that this money is sent by Remitters with a specific purpose, such as paying for school fees, medicine for a sick relative, to build a house, buy land, pay rent or for special occasions.

## Daily Expenses

a) To pay for daily expenses: food, medicines, school, utilities, rent

- 'Mostly the money they send is for food.'(S7 Haiti North rural)
- 'I spend the money on food and the school for my kids.'(S7 Haiti North rural)
- 'I use the money for day to day expenses like food, my rent, and medication when we get sick.'(S8 Haiti Centre rural)
- 'When I receive money I use it to pay for my daily expenses. '(S9 Haiti urban)
- 'I use the money for evangelization, to pay school for the kids, to rent for the house and when sick, we have to pay for medicine.'(S9 Haiti Centre urban)
- 'What they send represents $80 \%$ of my expenses. They help quite a bit.'(S10 DR StoDom urban)
- I'm a single mother. It covers the children's school, household expenses, and electric bill. It covers about 80\% of my expenses.'(S12 DR North rural).
- 'It helps me with about 80\%. My husband receives remittances besides the ones I receive. He pays for electricity, food, education, everything.'(S12 DR North rural)
- 'What they send me doesn't cover much, only food. I spend it at the market. It represents about $50 \%$ for me but sometimes they don't send me anything and I have to go out and get the money for the household expenses. Without this, it would be very difficult. I'd dig a hole and bury myself.'(S12 DR North rural)


## b) To complement income

- 'I use the money to help people who don't have or that have less than me.'(S7 Haiti North rural)
- 'For clothing and to buy things for the house like furniture and other things you need at home.'(S8 Haiti Centre rural)
- 'Half equals the most part of the expenses, and the other half contributes little, it's just a compliment.'(S1O DR StoDom urban)
- 'In my case I also work and contribute. The rest I pay with my work.'(S10 DR StoDom urban)
- 'My husband and I pay all the expenses, including university for our children. What they send us is extra.'(S1O DR StoDom urban)


## House Utilities: Gas, Electricity, Phone

- 'I use it to pay my electricity and telephone bills.'(S8 Haiti Centre rural)
- 'If the electric rate is high, between US\$280 and US\$400 I have to send it in installments and I have to have more money sent.'(S10 DR StoDom urban)
- 'I receive US\$200 each month. The electricity is so high; sometimes I receive US\$250 to buy electricity products.'(S10 DR StoDom urban)
- 'My mother sends me US\$50 per month from Boston for the electric bill and household expenses.'(S11 DR South rural)
- 'My son in Massachusetts sends me US\$100 every month that I invest in the electric bill, food, and gas.'(S11 DR South rural)
- 'My dad and my uncle and aunts send me between US\$150 and US\$50 from Boston. I use it to pay for electricity and gas for the stove. Otherwise, we don't eat.'(S11 DR South rural)
- 'My wife sends me US\$200 to US\$250 per month for expenses: fuel, electricity, food, rent.'(S12 DR North rural)
- 'My mother lives in New Jersey. She has been sending me US\$200 per month for 12 years to pay for the house, my daughter's food and electricity.'(S12 DR North rural)
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| To Invest in Own Business | Personal Needs: Clothes, Hair Style, Dating |
| :---: | :---: |
| - 'I receive US\$200 a month from my brother in NY. I use it for business, for eating, and to pay for my children's school.'(S7 Haiti North rural) <br> - 'I use money to supply my business. I sell gasoline and food products.'(S7 Haiti North rural) <br> - 'I use the money for commerce and for my kid's school.'(S7 Haiti North rural) <br> - 'I try to do a little business but the money they send is not enough. Most times it is pretty much just to eat.'(S7 Haiti North rural) <br> - 'I take care of my personal needs and use what is left over to do business with it. '(S9 Haiti urban) <br> - 'I invest in agriculture because I have a small piece of land in which I plant corn, tomatoes, eggplant, cabbage, carrot, and beets. I work the land for my consumption and to sell depending on the quantity I produce.'(S9 Haiti Centre urban) <br> - 'I also do business. I resell corn that I buy in bulk.'(S9 Haiti Centre urban) | - 'The money I get is for my personal use and my necessities. I buy clothes and other personal items.'(S8 Haiti Centre rural) <br> - 'My father sends me money separately, because if he sends it to my mother, she won't give it to me. My father sends to three different people, to my mother and to his two children. I go out with my girlfriend, I buy something.'(S10 DR StoDom urban) <br> - 'I pay for my personal expenses; I don't use the remittances for household expenses.'(S10 DR StoDom urban) <br> - 'The 50\% dollars my father sends me covers only 1\% of my expenses. The money he sends me is all for me and to buy something for the child.'(S10 DR StoDom urban) <br> - 'A friend of mine sends me US\$50 to US\$100 every three months from Boston for my personal expenses. I straighten my hair or by some underwear.'(S11 DR South rural) <br> - 'I use it for personal expenses or for the telephone because my husband covers the household expenses. Sometimes I buy something for the kids, but the money is for me.'(S12 DR North rural) <br> - 'If my daughter sends me US\$100, I pay for household things with what is left over, about US\$500 pesos (US\$15 ). But if there is anything left over, because gasoline is about US\$100 pesos (US\$2.85 ).'(S12 DR North rural) |


| School | Medicines and Hospitals | Other: Build a House, Buy Land, Pay Rent, Special Occasions |
| :---: | :---: | :---: |
| - 'My mother has sent me money for 15 years to pay for my studies. I majored in Social Studies.'(S8 Haiti Centre rural) <br> - 'I use all of the money to pay for school and education expenses.'(S8 Haiti Centre rural) <br> - 'My friends send me money to pay for my kids to go to school.' (S8 Haiti Centre rural) <br> - I just finish my university I still have to pay some stuff.' (S9 Haiti Centre urban) <br> - 'Every month my sister sends me US\$100-\$200 for my daughter's university.(S10 DR StoDom urban) | - 'It is always for medicine.'(S10 DR StoDom urban) <br> - II cover 90\% of household expenses. The remittance isn't for household expenses, it's only for medicine.'(S10 DR StoDom urban) <br> - 'My two siblings send me money from Boston to help with my father's expenses. One sends me US\$100 every two weeks and the other one sends me US $\$ 50$ every two months. I use the money medicine and food for my father.'(S11 DR South rural) <br> - 'I buy high blood pressure medicine with the money I receive, and when the obligations are paid, I buy something extra with what is left over.'(S11 DR South rural) <br> - 'My sister-in-law sends me USD\$60-65 every month, depending on how much she has. This money helps me pay for my father's medicine and pay for cable, the same Dominican routine.'(S11 DR South rural) | a) Build house <br> - 'I use the money they send for day-to-day expenses and to build homes. I already built my house and now I'm helping my mom and friends build theirs.'(S8 Haiti Centre rural) <br> - 'I receive money to pay the work being done to my house in Port-au-Prince. I am paying for the material to build the house and the salary of these people.'(S8 Haiti Centre rural) <br> - 'Sometimes people send me money for their families. The money is to be used for construction projects only. I'm the intermediary for those people and at times I charge a fee to manage the construction projects.'(S8 Haiti Centre rural) <br> b) Buy land <br> - 'My friend and cousin send big money for very specific things like to buy land or something expensive.'(S7 Haiti North rural) <br> c) Pay rent <br> - 'My niece sends money from Italy. She rents a house, she sends me 7,000-10,000 pesos (US\$200-285 ), and I pay it. It's the house where her father lives.'(S10 DR StoDom urban) <br> d) Special occasions like funerals <br> - 'When someone dies they send money for the burial.'(S7 Haiti North rural) <br> - 'There is a lot of money around when a person dies to help with the burial.'(S7 Haiti North rural) |

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## 2. Ways of Receiving Money

In general, Haitian and Dominican Recipients have been receiving remittances for a long time. The most frequently used method of obtaining the funds is via Money Transfer Agencies (MTI). Person to person is used fairly commonly, especially when receiving larger amounts, but bank transfers are used more rarely.

Usually, the method of transferring money or the institution used is a decision that rests with the Remitter, however, Recipients take part in this decision if their families abroad invite them to. While Receivers were not so focused on which organization their families used, they did have strong opinions about the qualities the transfer organizations

## Ways of Receiving Money

Hoy do you receive the money (remittances)?

should have. The most valued attribute is quick service and reliability. Recipients want to make sure that they can access their money within an hour of it being sent. Another important quality they mentioned is that they prefer the agency to be in close proximity to where they live or that the agency provide home delivery service. Especially in rural areas, they stressed the importance of sending the money to a local agency to avoid transportation costs. They noted that home delivery services and phone calls from agencies letting them know that their money is available save them additional trips to the agencies and the frustration of traveling in areas where transportation is not reliable. Few participants mentioned the fees incurred in transferring the money because, in their view, this was something the Remitter would deal with at the other end of the transaction.
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### 2.1 Evaluation of Money Transfer Agencies

| Western Union |  |
| :---: | :---: |
| Positives <br> a) It is convenient because it is close and fast <br> - 'Sometimes I go to Western Union to get money.'(S7 Haiti North rural) <br> - 'It's the best in the world or as good as Caribe Express.'(S11 DR South rural) <br> - 'Western Union definitely delivers it. It's safer.'(S11 D South rural) <br> b) Home delivery <br> - 'Western Union can also call you. They call you and can deliver the money to your home.'(S12 DR North rural) <br> - 'My father and a friend have been sending me money through Western Union for 12 years. Sometimes I haven't been able to go, I call and they deliver it to my house. With this money I pay for phone, cable, electricity, and my son's school.'(S12 DR North rural) <br> c) Free phone calls <br> - 'They give you a phone card. They're safer and faster. With the ten digits they give you the money.'(S11 DR South rural) | Negatives <br> a) It is expensive <br> - 'Western Union is the most expensive. Every US\$100 they take US\$8 and I don't like the service.'(S9 Haiti Centre urban) <br> - 'It's a little more expensive than Caribe Express.'(S11 DR South rural) <br> b) Money is paid in local currency not dollars <br> - 'They don't want to give you the money in dollars, they choose their own exchange rate.'(S9 Haiti Centre urban) <br> c) Not reliable <br> - 'They send the money and then you go and go back and the money is not there.'(S9 Haiti Centre urban) <br> - 'With Western Union I always have to give the address again.'(S12 DR North rural) <br> d) Complicated paperwork <br> - 'Western Union has to have all the information: sender, address, phone number of the person sending the money. I know it's a safety measure but it's a nuisance and a lot of paperwork.'(S10 DR StoDom urban) <br> - 'Western Union is a show.'(S10 DR StoDom urban) |


| MoneyGram |  |
| :---: | :---: |
| Positives <br> a) Low fees <br> - 'This one serves the poor people. They do not charge when I pick it up. Well, it's less fees to send or receive from here.'(S7 Haiti North rural) <br> - 'My family always sends me money with MoneyGram because fees are very low. I'm not sure how much they pay.'(S7 Haiti North rural) <br> - 'I know that the fee is only US\$8 to send US\$100 from the US.'(S7 Haiti North rural) <br> b) It is convenient <br> - 'It is closed to my house and I do not have to walk too far.'(S7 Haiti North rural) <br> c) Free phone calls <br> - 'They give good service, they are fast, and they call you on the phone when the money is here.'(S7 Haiti North rural) | Negatives <br> a) Too expensive <br> - 'I don't like MoneyGram because it is more expensive than UniTransfer.'(S7 Haiti North rural) <br> - I was charged US\$21 to send US\$300 to Santo Domingo. That's too much money'(S7 Haiti rural) |

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| UniTransfer (Haiti) |  |
| :---: | :---: |
| Positives |  |
| a) | No line and money gets here very fast |
| - | 'The money gets there fast when I send it to Santo Domingo. Sometimes I deposit money here and I pick it up there when I travel. They money gets there before I do.'(S7 Haiti North rural) |
| - | 'Fast delivery. I don't understand how it gets there so fast, but it does. It gives good service.'(S7 Haiti North rural) |
| - | 'I have no problems with any of them but I prefer UniTransfer because I don't have any lines.'(S8 Haiti Centre rural) |
| - | 'UniTransfer gives me better service and they are reliable.'(S8 Haiti Centre rural) |
| - | 'UniTransfer I prefer because it's quick service. They call (from abroad) and give you the number of the transfer and with that number you get the money right away.'(S9 Haiti Centre urban) |
| b) | There are several locations and my family chooses this way |
| - | 'I am used to UniTransfer and know them.'(S7 Haiti North rural) |
| - | 'I can get my money sent with UniTransfer at any Fonkoze branch and there are many.'(S7 Haiti North rural) |
| - | 'I get the money via UniTransfer or CAM depending on the choice of the sender. Depending on the location they might use one or another agency.'(S8 Haiti Centre rural) |
| - | 'UniTransfer because its there when they send it. My family chooses them so I have to use it. They are same they all have the same service.'(S9 Haiti Centre urban) |

## c) Phone calls

- 'UniTransfer is the same thing as CAM but they call to let me know when my money is there.'(S7 Haiti North rural)
- 'It's fast they call you when the money is there.'(S7 Haiti North rural)
d) Cheaper
- 'UniTransfer charges US\$7 for US\$100 and MoneyGram charges US\$8 for the same amount.'(S7 Haiti North rural)


## Negatives

## a) Security is a problem when picking up the money

- 'When you pick up your money in Port Au Prince with UniTransfer you get robbed. Somehow people know that you're picking up money and they rob you when you leave their offices.'(S7 Haiti North rural)
- 'A director of a UniTransfer branch called my friend to pick up his money and when he left the place he was robbed.'(S7 Haiti North rural)


## Positives

## a) Charges less fees compared to others

- 'The amount they take is minimal, about US\$10 bucks. Other transfer houses charge more.'(S9 Haiti Centre urban)


## b) Home delivery

- 'CAM gives us home delivery; in less than 2 hours, the money is home.'(S9 Haiti Centre urban)
c) Good customer service
- 'Sometimes we have agents that come see us to ask to use their service. When they do that, they give you a phone card to call your families for free. This way they get more clients.'(S9 Haiti Centre urban)


## d) Chosen by family

- 'People sending are used to what is closest to them so we receive wherever they choose. We get the number from the family and we go where they tell us to pick it up.'(S9 Haiti Centre urban)


## Negatives

## a) Don't understand the company

- 'I have the impression that when I go to Fonkoze that CAM works into Fonkoze also. I don't know how but they are linked.'(S9 Haiti Centre urban)

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| Caribe Express (Dominican Republic) | Quisqueyana (Dominican Republic) |
| :---: | :---: |
| Positives <br> a) Faster and safer <br> - 'Caribe Express has a good service because they are punctual and they call when the money arrives.'(S10 DR StoDom urban) <br> - 'With Quisqueyana I wait two days (for the money) but with Caribe Express it arrives in 15 minutes.'(S10 DR StoDom urban) <br> - 'Caribe Express calls me and I show my preferred client card and with that they give me the money.'(S10 DR StoDom urban) <br> - 'Caribe Express is efficient and they don't take long with the money. If they send it today I get it tomorrow at 4pm.'(S10 DR StoDom urban) <br> - 'Caribe is the best because it's constant and known. It arrives quickly, in two hours.'(S11 DR South rural) <br> - 'You wait for it to eat because it's fast. They also give it to the owner.'(S11 DR South rural) <br> - 'With Caribe Express. She sends it at 11am and it's here by 11:30.'(S12 DR North rural) <br> b) Home delivery <br> - 'Caribe Express delivers it to my home and they pay in dollars or in pesos. The rate is lower if they send it in pesos.'(S10 DR StoDom urban) <br> - 'With Caribe Express they deliver so for me it's the same.'(S11 DR South rural) <br> - 'With Caribe Express because they send it immediately. They call me and deliver it to my house right away. They tell me they are here-I go out and they deliver it.'(S12 DR North rural) <br> - 'My family sends through MoneyGram and Caribe Express. With Caribe Express the money arrives on time but Western Union takes a long time because they don't know how to get to my house. Caribe Express delivers it to my house.'(S12 DR North rural) <br> - 'Caribe Express because it is closer to them. '(S12 DR rural) <br> c) Delivers dollars or pesos <br> - 'I have received it in 10 minutes in dollars or in pesos, it depends on them.'(S11 DR South rural) <br> Negatives <br> a) Too many security measures <br> - 'With Caribe Express if you forget a number or a letter they don't give you the money.'(S11 DR South rural) <br> - 'It's more of a problem to get the money with Caribe, but with Western Union they don't ask for a lot of papers.'(S11 DR South rural) | Negatives <br> a) Not on time <br> - I had a lot of problems with Quisqueyana. The money sent from the US is supposed to arrive the same day, but it arrives the next day.'(S10 DR StoDom urban) <br> b) Money is received in pesos <br> - '(They send it) in pesos through Quisqueyana or Caribe Express.'(S10 DR StoDom urban) |

## Person to Person

## a) To save fees

- 'They send it through Western Union from person to person. They almost always send it person to person. It's more for me because they don't pay to send it so they send more.'(S10 DR StoDom urban)
b) I can get better exchange rates
- 'They send me Euros from person to person when a friend comes from Switzerland. That way I look for the best exchange rate (to pesos).'(S10 DR StoDom urban)


### 2.2 Evaluation of Banks

The level of financial integration amongst Haitian and Dominican Recipients is low in general, and much lower than Remitters. As the graph indicates, more Haitian than Dominican Recipients had bank accounts, and of those who said they had an account, a large majority said that the account was a savings account, with financial institutions including microfinance organizations and cooperatives as well as banks. Only a couple of Recipients had received money through a bank wire. The consensus was that it is complicated for them and for their families to send bank wires. A large amount of information is requested from both the Remitter and the Receiver, and if one number is incorrect, the money will not be delivered. Since only few recipients have access to bank accounts, bank wires are not a popular way of receiving money.


The general perception among Recipients was that banks are complicated and involve too much paper work. Getting a loan from a bank is unlikely because of requirements like collateral, being employed or owning a business. Furthermore, they thought that banking privileges like using ATM machines and credit cards are only made available to businesses and not to regular bank customers. Most Recipients said they do not have credit cards, unlike many of the Haitian and Dominican Remitters living abroad. One person spoke about using a credit card, but on further questioning, this person explained that actually the product was paid for with a credit card that belonged to somebody else. Dominican participants suggested that only the government or big corporations make payments or transfers by credit card. The overall feeling was that credit cards were a luxury available to few people. The small number of Recipients with bank accounts said that the banks are safe and reliable.

| Positive Comments | Negative Comments |
| :---: | :---: |
| a) I have a savings and checking account <br> - 'I have credit and a savings account with Banco del Progresso and with Banco Popular.'(S10 DR StoDom urban) <br> - 'I have a savings account with Banco Popular, a checking account with Banco de Reservas, and with Associacion Popular.'(S10 DR StoDom urban) <br> b) Banks are safer <br> - 'It's safer in the bank, so as not to keep it at home.'(S12 DR North rural). <br> - 'They're good and stable and don't fail.'(S12 DR North rural) <br> - 'In a bank but not in a microfinance institution because they won't fail. The microfinance institutions can go bankrupt and you loose the money.'(S12 DR North rural) | a) I do not have a credit card <br> - 'I used it to buy a parabolic antenna. It was not a real credit because I used my friend's credit card.'(S7 Haiti North rural) <br> - 'I use the ATM because I don't use credit cards. If I go to a place, I use the ATM.'(S10 DR StoDom urban.) <br> - 'There's no need and I don't have an account. Without an account I have neither a credit nor a debit card.'(S10 DR StoDom urban). <br> b) Loans are for other type of people <br> - 'You can find a loan only if you have a business.'(S8 Haiti Centre rural) <br> - 'You have to have a business to get a loan from the bank. If you have money in the country you can buy on credit, but not if you don't work.'(S9 Haiti Centre urban) <br> - 'There is not much credit available; it's only for a small number of people.'(S9 Haiti Centre urban) |

### 2.3 Opinion of the Use of the Internet for Money Transfers

In Haiti and the Dominican Republic, very few people use the internet. As indicted by the graph, out of a total of 30

## Internet Access: Recipients

## Percentage that responded YES

## Do you make any payments by internet? Type of payments



Haitian participants, only three people (10\%) make on-line payments; and out of a total of 28 Dominican participants, only two people (7\%) use the internet for payments.

The reasons include lack of electricity, lack of computers, lack of access to the internet, and also that Recipients prefer to make payments personally or by phone because they feel that making payments on-line is complicated and unsafe. Both Haitians and Dominicans agreed that not having access to credit cards makes internet transactions virtually impossible. In addition, some believe that there is an additional cost for using dialup or a modem to connect to the internet. Not only do they need to purchase a computer, they fear that the infrastructure required to navigate the web is too complex and expensive. : 'The internet is more expense. I can't have internet and I don't have it.' However, many Recipients realize the importance of using such a tool and the value of the knowledge that it provides. Many showed interest in learning more about the internet. The few participants who use the internet said that they do it on rare occasions to chat with friends or for schoolwork and research, or to make on-line payments.

| Opinion of the Use of Internet for Money Transfers |  |
| :---: | :---: |
| Positive Comments | Negative Comments |
| a) For work <br> - 'I sell products and that way my clients can deposit the money.'(S10 DR StoDom urban) <br> - 'At work I use it to listen to music and I also check to register people.'(S12 DR North rural) <br> - 'At work if they ask me for a hat I check what's on sale. To buy parts for vehicles.'(S12 DR North rural) <br> b) To chat with friends <br> - 'I use it to look for my friends and to chat.'(S8 Haiti Centre rural) <br> - 'To chat with my friends in the whole country and the world.'(S11 DR South rural) <br> - 'To chat with friends.'(S12 DR North rural) <br> c) A friend bought an item for me via internet <br> - I bought a charger and I paid for it in cash. A friend bought it for me. My friend had a credit card and I paid him.'(S12 DR North rural) <br> d) Research and school work <br> - 'I go into the internet for research. I use it for school research and to write to my friends.'(S8 Haiti Centre rural) | a) Do not have internet access <br> - 'I can't use the internet because I don't have electricity for my computer.'(S7 Haiti North rural) <br> - 'We are late technologically. We should not be missing light, computers, and internet like we are. The state is not helping us. There are a lot of things going on in the world, but we can't access them. We are in the dark.'(S9 Haiti Centre urban) <br> - 'I don't have it. The computer is very slow but it interests me.'(S12 DR North rural) <br> - 'I'd like it but I don't have it.'(S12 DR North rural) <br> b) It is unsafe to pay or transfer money via internet: 'I don’t like it’ <br> - 'No. I had an agreement where I paid the electricity over the phone. But once I paid and they didn't give me a receipt. So now I pay in person. I don't pay anything over the phone or internet because it's not safe. I don't trust them.'(S10 DR StoDom urban) <br> - 'If you put your money in an electronic account they steal the information, the password, and the money. I had a friend that was a systems programmer and he stole people's information that used that technology.'(S10 DR StoDom urban) <br> c) Do not make internet payments <br> - 'No, never!'(S8 Haiti Centre rural) <br> - 'No, not at all.'(S10 DR StoDom urban) |

### 2.4 Opinion of Prepaid Cards as an Alternative Method of Money Transfer

Recipients, like Remitters, had difficulties in understanding the term 'pre-paid card.' Once they realized that it refers to the cards used to 'recharge the prepayd cell', about half of the participants claimed to have used pre-paid phone cards and a few said they had used gift cards.
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The popularity of the pre-paid phone cards is due to the flexibility they provide in choosing a phone service without having to commit to a contract with a phone company. Pre-paid cards also help people control the money being spent: 'I use them to call Europe. The cards are safer because you have what you have and when it's finished, it's finished.' Unlike several Remitters living in New York who complained that phone cards are unreliable and costly, Recipients seemed much happier with the service provided by pre-paid phone cards companies.

## Like

a) You get what you pay for

- 'My line is open and I can call anywhere but sometimes they take my line and calls show up that I didn't make. With the cards I avoid that problem.'(S10 DR StoDom urban)
- 'They're excellent because you can communicate with your family with what you can afford.'(S11 DR South rural)
- 'It's important to be on top of the payments and you can use it in case of emergency.'(S11 DR South rural)
b) To charge the cell phone
- 'I use it just for calls to the US or for the mobile phone. I also add to the house phone because I have a limit and when it runs out I add more minutes.'(S10 DR StoDom urban)
- 'I use them to put money on the mobile phone but also for the house phone.'(S11 DR South rural)
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## 3. Energy and Electricity Supply in Haiti and the Dominican Republic

### 3.1 Importance and Quality of Energy Services

Both Haiti and the Dominican Republic have major energy challenges. As the graph shows, a smaller number of Haitian Recipients are connected to the grid than Dominicans. Recipients said that the problem in Haiti is the lack of infrastructure and the problem in the Dominican Republic is the unreliability of the electricity system and illegal wiring.

All focus group participants in Haiti and the Dominican Republic expressed resentment and frustration when asked about their energy situation. Some angrily answered: 'It's not that we have a problem with electricity, it simply doesn't

exist.' The majority have to deal with constant blackouts: 'I don't know when they are turning the electricity off or when they are keeping it on.' People living near towns with better service were particularly angry and blamed the government - in Haiti for its inability to provide regular service and in the Dominican Republic for privatizing the electricity service, which has created problems like favoring certain towns or regions over others. People were particularly bitter about not receiving service they had paid for.

Recipients complained that in the Dominican Republic, short circuits regularly cause electricity surges that cause cables to ignite, ruining household appliances. In the Southern town of Bani in Dominican Republic, participants said: 'There are a lot of deaths because of short circuits. Not long ago, several people died in a house on fire.' The lack of consistent energy availability has created a wave of social problems in some communities.


## Blackouts All Day Long

a) There are blackouts all day long. Light comes for short periods during the day

- 'Yes, we all have problems because it is not constant because I can get it for an hour and then it goes. It's in and out all the time.'(S7 Haiti North rural)
- 'The blackout problems are the same everywhere. It is the same problem in all towns. I get 3 hours a day of electricity and the rest is a black out.'(S7 Haiti North rural)
- 'This morning the power went out at 9am and was restored at 5pm.'(S10 DR StoDom urban)
- 'As you can see the power is out and it may be restored at midnight.'(S11 DR South rural)
- 'In the mountains it's shut off at 7am and is restored at 4pm. Then it is cut again at 6 and returns at midnight. You can't even count the power outages.'(S11 DR South rural)
- 'Terrible. It hardly goes out because it almost never returns. At my house it's cut off at 8am and is restored at 7pm.'(S10 DR StoDom urban)
- 'At my house the power goes out at least three times a day. I only have power between 2 and 6pm.'(S10 DR StoDom urban)
- 'There is no electricity from 7 in the morning until at night.'(S11 DR South rural)
b) The effects of blackouts ruin home electronics, change in lifestyle, causes death
- 'At my house it's out from 1pm to 7pm (6 hours) and in the middle of the night, between 3 am and 8 am (5 hours). At night sometimes you can't even watch TV.'(S10 DR StoDom urban)
- 'If there's no light at night at least you can sleep with the fan. But without that, it's worse.'(S10 DR StoDom urban)
- 'The TVs and refrigerators break because of all the blackouts.'(S11 DR South rural)
- 'In a house 6 people died because the power came back and set the house on fire.'(S11 DR South rural)
- 'A boy got stuck to the refrigerator. When he opened it, it electrocuted him. These deaths happen every day.'(S11 DR South rural)
c) There are blackouts that last for days
- 'I have problems with it (electricity) every day. I am lucky to have electricity 1 hour a day.'(S7 Haiti North rural)
- 'We can be 4 or 5 days without it.'(S8 Haiti Centre rural)

| Service has improved | Service has deteriorated | Bad customer service |
| :---: | :---: | :---: |
| a) Supply has improved lately <br> - 'Not long ago there was a problem of high voltage that was so strong that even mobile phones had electricity though you didn't feel it. This problem has been fixed.'(S11 DR South rural) <br> - 'Blackouts used to last 8 to 12 hours. Days could go by without the power coming back, just for a little while at night. A parking garage that needed electricity and people spent the entire day trying to get their car out.' (S12 DR North rural) | a) Electric infrastructure is old and unreliable <br> - 'We have problems now because our electric plant is old and needs a lot of repairs but they are not replacing the old parts. Our electric plant is very old.'(S8 Haiti Centre rural) <br> - 'The plant is 40 years old and it's starting to give us problems. The service is not perfect and it will keep on getting worse.'(S8 Haiti Centre rural) <br> - 'Electricity is something we never see here. Back in the day ( 5 to 10 years ago) we at least would see it..'(S9 Haiti Centre urban) <br> b) With privatization, it is worse; government does not help <br> - 'I used to complain before privatization. But now it's worse. At least when I complained before, they'd come and see. Now nothing happens even if I complain.'(S10 DR StoDom urban) <br> - 'There's no control of electricity and the government doesn't help. It is never solved.'(S11 DR South rural) <br> - 'We live like animals. There're no subsidies and the government isn't paying the electric companies.'(S10 DR StoDom urban) | a) They take too long to connect and to reconnect the service <br> - 'I applied for electricity 6 months ago and I still don't have service.'(S7 Haiti North rural) <br> - 'When they cut off my electricity for lack of payment, I call and ask how much I owe. After I've paid they say they'll reconnect me but they don't come when they're supposed to. Once they said they'd come on Monday, and when they didn't come I called to complain and they said I owed 13 pesos (. 37 cents) and that's why they hadn't reconnected.'(S10 DR StoDom urban) <br> b) They charge for services not rendered <br> - 'They are stealing from me because I pay and I don't get anything from them (electric company).'(S7 Haiti North rural) <br> - 'You can pay the bill at stores or drugstores. I'd rather pay at the electric company building because at the drugstore I got two bills. I'd pay one, and they'd cut the service because of the other, so I had to pay twice. I'd rather go pay in person.'(S10 DR StoDom urban) <br> - 'Here we pay and don't get any service.'(S11 DR South rural) <br> - 'You have to pay the electric bill even if they don't give you the service.'(S11 DR South rural) <br> c) No place to voice complaints <br> - 'There is nothing I can do when the electric company cuts my electricity.'(S7 Haiti North rural) <br> I have a contract and they charge me but they don't give me light.'(S7 Haiti North rural) |

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### 3.2 Two Cases of Good Energy Service: Mirebalais (Haiti) and Bonao (Dominican Republic)

There were two groups that were the exception in the study, and very likely not representative of most people living on either island. Both were rural groups, one in Haiti and the other in the Dominican Republic. Their energy situation was much better than the rest of the groups due to two unique situations. The town of Mirebalais in Haiti is located near a power plant that provides electricity to the Center region of the country. This proximity allows these residents to enjoy a reliable source of energy: 'We are lucky because we benefit from having an electric plant in our backyard.' However, the power plant is in need of repairs and people are now starting to suffer from irregular service.

The situation in the Dominican Republic is different. In the Northern town of Bonao, people are using a system initiated by the electricity companies called ' 24 hours,' which guarantees electricity all day long to those who pay their electric bills on time. This program was developed when a neighborhood association organized people to negotiate with the local electricity union. It has been a great success because paying the electric bill on time has become a priority for the citizens of Bonao, 'If I get the bill, I pay the next day. We're more responsible than those over there. People go hungry in order to pay the electric bill.'

Even though Bonao enjoys better service, it is not perfect: 'Yes, we have power for 24 hours. It goes out for 10 minutes, like in NY. A few days ago it got out of control because the power was out for over 1 hour.' These measures are part of the Program to Reduce Blackouts (Programa de Reducción de Apagones, $P R A$ ). The idea is to improve electricity service and to control tensions that have been increasing since the late 1990's when the government supply of electricity was privatized. Many complain that the energy situation is worse today with private companies and the government working together, than when the government was responsible, as now no one responds to demands.

## Two Cases of Good Energy Service: Mirebalais (Haiti) and Bonao (Dominican Republic)

a) Do not have electric problems

- 'I don't have any problems.'(S8 Haiti Centre rural)
- 'I don't have a lot of problems but people who live near me do have many problems.'(S8 Haiti Centre rural)
- 'I have electricity every day.'(S8 Haiti Centre rural)
- 'We always have light because we live in the city of Mirebalais, but they have problems outside of the town.'(S8 Haiti Centre rural)
- 'In general we have good electricity.'(S8 Haiti Centre rural)
- 'For us living in the center of town the electric service is not bad.'(S8 Haiti Centre rural)
- 'The answer for this question will be different in Hinche because they are not near the grid. We don't have those needs because we live in the city.'(S8 Haiti Centre rural)
- 'Because the electric plant is near by. This is the plant that gives service to the West and the Center of the country.'(S8 Haiti Centre rural)
- 'It's more important for them than for us. In Santiago there are power problems, in la Vega and in the South.'(S12 DR North rural)
- 'The problem is that here we pay for 90\% of electricity. There, in Bani, they only pay 50\%. 2 years ago they gave us power for 24 hours. It used to be blackouts all the time.'(S12 DR North rural)
- 'There are blackouts in other sections of Banao where the power is out from 8 am to $4 p m$. Here there are no problems because we pay. We're more responsible, it's not that we have more money.'(S12 DR North rural)
b) Problems only during emergency or natural disasters
- 'We have electricity most of the time with a few exceptions like when the electric poles fall; it can take them a few days to replace them.'(S8 Haiti Centre rural)
- 'We sometimes have problems with electricity because there are repairs going on with the system.'(S8 Haiti Centre rural)


### 3.3 Lack of Energy as an Obstacle for Development

The lack of energy has a number of direct effects in both Haiti and the Dominican Republic on employment, education and personal security. People feel that there is a link between the lack of energy and rising unemployment rates, which in turn limits people's ability to provide financial support for their families, and makes them more dependent on remittances: 'That is the importance of transfers. I can call someone to help with my activities here. Eating everyday is a luxury for many people. I have a brother who is helping me but others don't have that. If you don't have your family to
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support you, it stops you doing things.' A number of participants explained that without electricity, they couldn't work. For example, a welder and a seamstress, both of whom are self-employed, cannot run the machines they need for their businesses because of electricity shortages. Secondly, education suffers because children are not able to do homework at night. There were reports that students who take night classes have lost entire school semesters because classrooms were dark, and people complained that children cannot use equipment like computers for research or homework assignments due to lack of electricity. Recipients explained that without electric lights, security concerns increase because 'after 6 pm we don't want to be in darkness because we can get robbed.' Some of these frustrations are taken to the streets (particularly in the Dominican Republic) in the form of demonstrations against local government officials: 'The government is ruining the country, and there are strikes in the neighborhoods, marches and people have even been killed.'

| Causes Unemployment | Makes it Difficult to Study | Increases Public Security Issues | Lack of Infrastructure |
| :---: | :---: | :---: | :---: |
| - 'I do not have a job and really have nothing to do during the day. I would like to watch television to catch the football game but I can't even do that.'(S7 Haiti North rural) <br> - 'We are in the dark; we can't have iced water and cold beverages. I can sell cold drinks as a business but because of the dark at 6pm everything stops. We go to sleep because everything is dark after 6pm.'(S9 Haiti Centre urban) <br> - I'm a blacksmith and can't work without electricity. I can't use my tools so I can't work much.'(S11 DR South rural) <br> - 'If you're making an iron door and the power goes out, you have to stop, and by the time it returns, it's too late. You can't work like that.'(S11 DR South rural) <br> - 'My sewing machine is electric so I can't work without electricity.'(S11 DR South rural) <br> - 'I have a grandson who works in a workshop and they can't work without electricity.'(S11 DR South rural) | - 'The kids can't study and it's insecure for us because it gets dark at 6pm.'(S9 Haiti Centre urban) <br> - 'We don't have electricity, the kids can't study. They have problems at school.'(S9 Haiti Centre urban) <br> - I'm a student and I need to do research for my studies. I have to go away for two hours to get the information I need. I should have this access as a student.'(S9 Haiti Centre urban) <br> - 'We have to send children off to school without ironing their clothes.'(S11 DR South rural) <br> - 'The day students aren't affected but the ones who go to school at night can't study without electricity.'(S11 DR South rural) <br> - 'In class the lights would go out so they'd send us home. I didn't go any further than $6^{\text {th }}$ grade because of that. This problem has been around for about 40 years.'(S11 DR South rural) | - 'Crime happens all the time in Port Au Prince in particular.'(S8 Haiti Centre rural) <br> - 'Electricity is the biggest problem in Haiti and Hinche. We even have demonstrations in the street. We demonstrate hoping for change, the kids and the adults took the street. It happens in Hinche every 2 or 3 months. '(S9 Haiti Centre urban) <br> - 'After they do the exam at school if we don't pass we take the street. We realize that because we don't have access to light, we do badly in the exams. <br> Protestors are as young as seven years old.'(S9 Haiti Centre urban) <br> - 'We have security concerns.'(S9 Haiti Centre urban) <br> - 'We would buy a refrigerator. Everything would be fresh to eat or sell. After 6 pm we will not be in darkness. Right now we have to be home at 7pm because we can get robbed.'(S9 Haiti Centre urban) <br> - 'We're a very tight group. We tell the "trigues" (who burn tires) that they're going to cut down trees, we have neighborhood meetings and we talk with them. That's why they gave us new wires. We spoke to the government and we told them that if they didn't give us electricity, we'd send the burners.'(S12 DR North rural) <br> - 'They took a motorcycle motor from my house'(S12 DR North rural) <br> - 'They even steal children. They kidnap if they know there's money.'(S12 DR North rural) | - 'The biggest problem we have is that we don't have access to drinking water.'(S8 Haiti Centre rural) <br> - 'The water is bad quality because the equipment is not sufficient for the population. Our cisterns are not in the right places therefore it doesn't distribute the water like it should.'(S8 Haiti Centre rural) <br> - 'We pay a lot for the water yet we don't have good supply.'(S8 Haiti Centre rural) <br> - It's no life, which is why I want to go to NY. There's no power, no jobs, which is why children start stealing when they're 15.'(S11 DR South rural) |

### 3.4 Ways to Address Energy Needs

Recipients use various means to address their energy needs depending on their income levels. People in both countries use candles, batteries, gas lamps, energy capacitors, inverters, generators and in isolated cases solar panels.

The inverter is the number one energy source for Recipients. People who can afford them use inverters to meet their electricity needs; but inverters are expensive, ranging in price from US\$500 to US $\$ 1,000$, depending on capacity. In addition to this cost, people must also pay for batteries. Some people commented on needing two batteries to run a normal-sized inverter, and that batteries are so expensive that some people get a specific remittance to finance the

batteries for their inverters. In addition, participants said that they need to keep paying for the electricity bill to charge the inverters. As a result, not everyone is able to afford an inverter. However, although it is an expensive alternative, inverters have become a basic need, as important as having a refrigerator at home, and are viewed as being key for business use as well.

Participants described the different ways they have managed to pay for inverters: some pay the vendor in installments, some save the full amount and pay for the inverter in cash, and others receive it from abroad as a gift. The only problem that Recipients noted with inverters is that when blackouts last a very long time, the batteries cannot be recharged. This means that they not only end up without energy, they also run the risk damaging the batteries.

Recipients also use energy capacitors to increase the electricitry voltage, and generators to provide themselves with energy, although these items are less common. Generators are expensive, and the additional cost of paying for fuel to run them is a luxury not everybody can afford. A few participants in each group also mentioned solar panels as a mean to provide energy at home, in both rural and urban areas. However, these energy devices are considered to be the most expensive option (detailed comments about solar panels are contained in the next section). Other ways in which people have overcome energy shortages are by modifying their lifestyles; for example, by doing housework at night (especially chores that require electricity such as laundry, ironing, filling the water tanks, and charging the inverter), purchasing food and cooking on a daily basis due to lack of refrigeration, or simply adapting to living without electricity. In addition, Recipients alternate energy sources and the use of home appliances; for example, a Dominican Recipient
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said that to use the laundry machine, she needs to unplug the refrigerator and can only have some lights and the fan on, otherwise the inverter breaks down.

Haitian Recipients are more likely to either do without electricity or to find ways to acquire gas lamps, inverters or generators. Dominican Recipients are more likely to access electricity illegally. These participants said that stealing electricity is the only choice they have, otherwise somebody else would steal electricity from them. Hiring a 'suicidal electrician' to connect people illegally to the system and using fake electricity meters are common practices, especially in remote and poor areas. The authorities are aware of this phenomenon. In general, people said that they were reluctant to pay for a service that is unreliable.

| Combine the Use of Candles, Flashlight, Batteries and Kerosene/Oil Lamps | Use Inverters and Generators |
| :---: | :---: |
| a) Multiple items used to solve our problem <br> - 'We use the candles and lanterns. Without my lantern I would be in the dark everyday.'(S9 Haiti Centre urban) <br> - 'There is no electricity. All I have are lanterns, candles, and a flashlight.'(S7 Haiti North rural) <br> - 'We use candles and buy gas for lamps. I have three lamps that I light as soon as the electricity goes out. '(S11 DR South rural) <br> b) Only lamps, candles, or flashlights <br> - 'One never knows when the electricity will come back so I have to use a flashlight if it doesn't.'(S7 Haiti North rural) <br> - 'Gas lamps.'(S10 DR urb) <br> - 'Lamps that are used in the country but it is technology from the 60's.'(S12 DR North rural) <br> - 'More candles than generators or inverters. Because they're needed.'(S12 DR North rural) <br> c) Candles are dangerous <br> - 'Candles are dangerous because they cause fires. In the house we use a lamp, and candles for outdoors.'(S11 DR South rural) <br> - 'Children get burned and there are fires when the candles fall.'(S11 DR South rural) | a) Many people provide their own energy <br> - 'Because we don't have service we use all type of system invertors, generators and batteries.'(S9 Haiti Centre urban) <br> - 'We work with generators, inverters, and gasoline when we can afford it.'(S8 Haiti Centre rural) <br> - I bought an inverter for the blackouts. My father sent the generator from NY because when there's no power use the generator to charge the inverter.'(S12 DR North rural) |


| Inverter: Characteristics | Inverter: Ways of Getting It |
| :---: | :---: |
| a) Inverters are a basic need: as important as a refrigerator <br> - 'In the DR, inverters are as necessary as refrigerators.'(S10 DR StoDom urban) <br> - 'Inverters because you have power for 8 hours.'(S11 DR South rural) <br> - 'Inverters are a necessity. You sacrifice to pay for it so as not to be in the dark.'(S12 DR North rural) <br> - 'If the power lasts one hour, you have electricity for one hour. But if I charge the inverter for one hour, the fan lasts all day.'(S11 DR South rural) <br> b) It is key for business use <br> - I have an inverter because my brother makes clothes and we use it as a back up because he needs electricity to be able to work. Without it he can't produce his clothes.'(S8 Haiti Centre rural) <br> - 'I bought the inverter for work here.'(S12 DR North rural) | a) Paying in installments from vendor <br> - 'You can pay in installments, two years.'(S11 DR South rural) <br> - 'I bought mine used for US\$ 22,000 pesos (US\$630) and it took me one year to pay for it.'(S11 DR South rural) <br> - 'I bought mine for 3,000 pesos (US\$85 ) in monthly payments of 1,000 pesos (US\$28 ).'(S12 DR North rural) |

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| Inverter: Characteristics (continued) | Inverter: Ways of Getting It (continued) |
| :---: | :---: |
| c) Cost of inverters: US $\mathbf{\$ 5 0 0}, \mathrm{US} \$ 1,000$, depending on the capacity <br> - 'Depends on the watts, some are 200 watts, 1000 watts, I have a 1,500 watts. One of 300 watts is about US\$500 Haitian (US\$62.5 ).'(S9 Haiti Centre urban) <br> - 'I don't have one because I can't afford it. For an inverter that is one kilowatt with two batteries that works for the TV, the fan, and three light bulbs, it costs US\$17,500 (US\$500 ).'(S11 DR South rural) <br> - 'An inverter costs about 20,000 pesos (US\$570). That's affordable.'(S10 DR StoDom urban) | b) Saving the full amount and paying in cash <br> - 'By saving remittances.'(S11 DR South rural) <br> - 'I saved US\$10 to US\$20 at a time for 6 months. I paid 5,000 pesos (US\$142) for a used one many years ago. But there are offers on the street.'(S11 DR South rural) |
| d) Too expensive to provide <br> - 'We don't all have 20,000 pesos (US\$570 ) to buy it.'(S10 DR StoDom urban) <br> - 'We can't afford them because they are expensive.'(S11 DR South rural) <br> - 'Everyone knows about inverters but not everyone has one.'(S11 DR South rural) | - 'Depending on my income, I prefer a single payment. If you have it it's cheaper because you don't have to pay interest.'(S12 DR North rural) |
| e) Need to keep paying for electricity to charge inverters | c) Gift from the Remitter |
| - 'Inverters are used with electricity stored from the electrical company. It's double the cost because you have to pay for the electricity to charge it.'(S10 DR StoDom urban) <br> - 'The electric bill is higher because of the inverter.'(S10 DR StoDom urban) <br> - 'I can't afford it because it costs US\$25,000 - US\$40,000 pesos. US\$15,000 is what you pay.'(S12 DR North rural) | - 'They sell them in Hinche. I got one with money my family sent 2 years ago. I don't remember how much I paid for it.'(S9 Haiti Centre urban) <br> - 'They send me the money and I buy the product.'(S10 DR StoDom urban) |
| f) Batteries need to be recharged constantly, but if the blackout is long, inverters are useless | - 'The inverter was very small; they saw it and sent me to buy another |
| - 'The inverter is the system. The batteries are charged by the inverter; without it you can't use electricity.'(S9 Haiti Centre urban) <br> - 'The problem with the inverter is that it works with the batteries and if you don't charge them you can't use it. If you don't use the battery it spoils and we lose the batteries too.'(S9 Haiti Centre urban) | one.'(S10 DR StoDom urban) <br> - 'My brother bought it for my sick father who needs the fan. He came to Bani and bought me the inverter.'(S11 DR South rural) |
| - 'There are so many blackouts that the inverters don't work properly. There's not enough power to charge them so they can't be used. I need two batteries for the inverter.'(S10 DR StoDom urban) | - 'My brother asks me how much the inverter is and sends me the money for it and then I buy it.'(S12 DR North |
|  | - 'My children's father bought it here.'(S12 DR North rural) <br> - 'I didn't pay a cent. It was a gift from them.'(S12 DR North rural) |




## Steal Electricity Through Illegal Wiring

a) Illegal wiring to avoid paying

- 'People steal electricity. When they disconnect yours, people steal it so they don't have to pay.'(S11 DR South rural)
- 'The less energy there is the more they charge so I'd rather steal it. If they can't afford it, people steal it.'(S11 DR South rural)
b) Stealing is the only choice; either I steal it or someone will take it from me
- 'You have to steal it once in a while because there are too many power outages.'(S11 DR South rural)
- 'When they take the wires away, I hide and connect my power and don't pay because they won't give me the service. They give little and charge a lot.'(S11 DR South rural)
- 'Sometimes people steal it from a street corner because it's all they can do.'(S11 DR South rural)
- 'If I pay, people steal from me. So I'd rather steal and not pay.'(S11 DR South rural)
c) Some remote areas and poor sectors get away with it
- 'In some places that are connected you can see the illegal connections that go straight to the original. It's hard for them to disconnect you because they all go to the same place.'(S11 DR South rural)
- 'It depends on where you live because there are places where they don't check the lines and don't care.'(S11 DR South rural)
- 'When they look at the cables they can tell that you are stealing and they fine you. But in other places they can't see the cables because they are high up (in the mountains) so they don't know.'(S11 DR South rural)
d) Hire a "suicidal electrician"
- 'If the cables don't reach your house, you can buy the additional wire to cover the distance and hire a suicidal electrician to connect you to the power.'(S11
- DR rur)
- 'I do the same. I pay the suicidal electrician and he connects the wires above the trees near the house. You save money with the suicidal electrician because you don't pay the electric company.'(S11 DR South rural)
e) Use a fake electricity meter
- 'They came to check if we were stealing at my house and went all the way up on to the roof. They didn't fine me because I'm paying what my meter says, but my meter is pirated, so I'm stealing anyway.'(S11 DR South rural)
- 'If I remove the meter they won't charge me because I'm stealing from someone else.'(S11 DR South rural)
- 'When the meter stops working they send someone to investigate.'(S11 DR South rural)


### 3.5 Cost of Accessing Energy

Recipients pay a high price to supply their homes and businesses with energy. They pay for a range of sources of energy, such as wood, charcoal, gas, batteries and fuel, as well as formal electricity payments. In Haiti, participants rely on wood and charcoal for cooking, wood being the most affordable alternative, whereas charcoal is more expensive (on average, Recipients said they spent US\$4 on charcoal for five days of cooking). Gas is considered a luxury for the wealthy. Recipients said that batteries to charge inverters cost from US $\$ 100$ to US $\$ 300$ or more, while batteries for a
solar panel cost US\$130. Gas costs range from US\$14-\$20 to more than US\$100 a month, depending on consumption rates.

Dominicans pay approximately US\$15 to US\$45 a month on electricity bills, but a number of people reported paying more than US\$50 a month. In fact, several Dominican Recipients said that a considerable portion of their remittance is used to pay electricity bills. They complained about electricity being expensive, but were particularly angry about not receiving the service they pay for. Haitians on average pay less for electricity, around US\$10 a month. When these amounts are added to the costs of running a home, the sum becomes significant. According to a Dominican participant, 'I pay US\$1700 pesos (US\$48) for my electric bill, US\$500 pesos (US\$14) for cable, and US\$800 pesos for the phone bill. It's expensive here.' In addition, several Dominican Recipients complained about repeatedly having to pay reconnection costs. They explained that the electricity company disconnects the service if the bills are not paid on time, putting even a bigger dent in the family budget.


## Reconnection Costs (Dominican Republic

a) It is expensive to reconnect when bills are not paid on time

- 'Each time there's a blackout, it's more expensive to reconnect.'(S10 DR StoDom urban)
- 'If you don't pay the electric bill on time you have to pay the bill, the fine, and the reconnection fee.'(S10 DR StoDom urban)
- 'If we don't pay, they take the wires that connect to the grid. If they take them, I have to pay twice the amount for them to reconnect the electricity.'(S11 DR South rural)
- 'If I don't have the money, I connect illegally until I can pay for it, but then I have to pay US\$1000 pesos (US\$29), US\$500 pesos (US\$14.50) for what I owe plus US\$500 pesos (US\$14.50) in penalties.'(S11 DR South rural)
- 'The problem is that if you have a contract you have to pay for electricity even if you're not using it. They come and cut the cables.'(S11 DR South rural)
- 'If you don't pay, they cut it off. They'll reinstall it, but you have to pay an extra US\$350 pesos (US\$10).'(S12 DR North rural)


## 4. Knowledge of Sustainable Energy Products

The level of knowledge of sustainable energy products is very uneven among Recipients. There are three types of segments: 1) people that have little or no knowledge of these items; 2) people that have seen them in and on top of houses in cities, in rural areas, in stores or on TV programs or in commercials; and 3) people who own a solar panel and are very knowledgeable on the topic.


The majority of Recipients are aware that solar energy exists, but how it works is unclear to them. Even those who are familiar with solar energy had difficulties in explaining what the word 'sustainable' means. Participants who knew little or nothing about such products seemed interested to learn more, but feared that they would not be able to afford such innovations.

To understand their pricing assumptions, it was important to distinguish among participants that had little knowledge on the topic as opposed to people conversant on the topic. The majority said that that having sustainable energy product is a luxury that an average person cannot afford: 'A lot of people have them. People who have cash can buy it. It's a luxury but a lot of people have it.' Prices given for a solar panel ranged from US $\$ 1,000$ to US $\$ 5,700$ depending on capacity. It was interesting to learn that in Haiti, these items can also be bought second hand, so prices were more affordable and ranges went from US $\$ 120$ to US\$400.


## Knowledge of Cost

a) We believe that sustainable energy products are very expensive; not for people like us

- 'We all think panels are expensive. Only people who have cash can get them.'(S8 Haiti Centre rural)
- 'People that don't have electricity have the panels but only those who have more money.'(S8 Haiti Centre rural)
- 'The economy is different for us in Haiti. We don't have the ability to pay for it (panels) even though we need them.'(S8 Haiti Centre rural)
- 'If you are getting a solar panel or inverter you wouldn't have this problem. There are only few people around this table that could have the money to buy it.'(S9 Haiti Centre urban)
- 'There is a big stock of solar panels in Hinche but money to buy is the problem.'(S9 Haiti Centre urban)
- 'There isn't enough money for everyone to have it because having it in the house is expensive.'(S11 DR South rural)
- 'Everyone would have them if they were cheap, and that's not good for the government because of what you pay for electricity.'(S11 DR South rural)
- 'It needs to be more cheap because that way we poor people could buy them.'(S11 DR South rural)
- 'If there were ways to pay in installments, we'd buy them.'(S11 DR South rural)
b) Solar panels are expensive: US\$1000, US\$1150, US\$1400, US\$2000, US\$5700
- 'It's very expensive and I know that there are some that sell for US\$2000 .'(S7 Haiti North rural)
- 'The prices they are giving are not the right prices. Those are second hand prices. I don't know what they cost but I know that the real price is probably US\$1,000 not US\$400.'(S7 Haiti North rural)
- 'It's approximately US\$2000 for a panel and 4 batteries to serve your house.'(S7 Haiti North rural)
- 'The prices of these products are expensive but we need the technology and we are willing to pay for it.'(S8 Haiti rural)
- 'I bought it a long time. I don't remember the price...\$240 .'(S9 Haiti Centre urban)
- 'My sister bought a solar system for US\$200,000 pesos (US\$5700) in Santo Domingo in order to be completely independent. She doesn't use much public electricity because the panels charge with the sun on the roof.'(S10 DR StoDom urban)
- 'Between US\$35,000 and US\$ 40,000 pesos (US\$1000 and US\$1150) but they can cost more. Saving on electricity can be more expensive if it's for life, so it's more expensive.'(S11 DR South rural)
- 'It depends on the size. It can be more expensive, it depends on the batteries. One with 7 batteries would cost about US\$50,000 pesos (US\$1430 ).'(S12 DR North rural)
c) Expensive, but can get them cheaper if they are second hand: US $\mathbf{\$ 1 2 0}$, US $\mathbf{\$ 2 4 0}$, US $\mathbf{\$ 3 6 0}$, US $\mathbf{\$ 4 0 0}$
- 'In my house we don't use it because there are other options. The company was in Sibao, where it was cheap to buy them. They're expensive here.'(S10 DR StoDom urban)
- 'I think they cost 3500 Haitian dollars (US\$360). They are more expensive for houses but you can buy them second hand.'(S7 Haiti North rural)
- 'There are some that are \$200 Haitian dollars (US\$240) with 4 batteries for charging but you don't need the batteries.' $\mathbf{~}$ (S7 Haiti North rural)
- 'It's about 5,000 Gourde (US\$120) for a small size but the price will depend on the dimensions.'(S8 Haiti Centre rural)
- 'Depends on the watts (capacity): for 75 watts it will cost like US\$360 .'(S9 Haiti Centre urban)
- '\$400 I think.'(S7 Haiti North rural)


## d) No idea of the cost

- 'I don't know maybe US\$5500 .'(S7 Haiti North rural)
- 'That's what we are told and we are made to believe but I don't believe it.'(S8 Haiti Centre rural)
- 'I think the panels are expensive but I don't really know. I have never done any research about it.'(S8 Haiti Centre rural)
- 'I have heard that they cost approximately US\$1,000 but they don't tell us the capacity or anything else.'(S8 Haiti Centre rural)
- 'I'd pay DP\$500 pesos (US\$15 ) and I'd like that.'(S11 DR South rural)
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### 4.1 Qualities Valued in Sustainable Technology

The majority of Recipients agreed that sustainable energy products have a positive effect on the environment. Some Haitians seemed concerned about the deforestation problem in their country and pointed out that generators 'pollute the air with their fumes.' Other qualities valued by both by Haitian and Dominican Recipients include the following: there fewer energy bills with solar energy; it is a reliable source of energy that offers independence from the electricity companies; service and maintenance have a low cost, and it is easy to find people that provide these services. Overall, most participants believe that sustainable products 'are marvelous' and they are eager to learn more about sustainable technology.

|  | Reliable |
| :---: | :---: |
| a) Provides clean energy and protects the environment <br> - 'The sun is something we should exploit but we are not. Those products are the first block that will allow us to start using the sun as a source of energy.'(S8 Haiti Centre rural) <br> - 'The sun it's a great resource. The solar panel might be a big investments but it is interesting. If we use it, it can do a lot for us. It does not damage us like the generators that pollute the air with the fumes. When we are around we inhale this bad air and it's bad for us.'(S9 Haiti Centre urban) <br> - 'This is the importance of the renewable system. If you have it people stop cutting trees. When the hurricane comes because of the lack of trees we get in big problems.'(S9 Haiti Centre urban) <br> - 'I know that it's clean energy, that it's harmless and has good results.'(S11 DR South rural) <br> b) Less bills to pay when using solar energy <br> - 'It depends on the batteries it has. There's the inverter, the TV, the refrigerator, the light bulbs and even the air conditioning. I used to pay US\$15,000 pesos (US\$430) for electricity but now I don't.'(S12 DR North rural) <br> - 'To be clear, with the panel you don't pay for electricity.'(S10 DR StoDom urban) | a) Offers self-sufficiency: $\mathbf{2 4}$ hours of electricity <br> - 'They are good and it gives you 24 hour service.'(S7 Haiti North rural) <br> - 'I would like to have light for 24 hours straight all the time. A solar panel is perfect because you can charge it with the sun.'(S7 Haiti North rural) <br> - 'I would be able to charge my phone.'(S7 Haiti North rural) <br> b) They are a necessity <br> - 'Solar panels are necessary; it is more than a need, it is a must. It's good because you can use the light for kids to study and at night you can do your stuff.'(S9 Haiti Centre urban) |


| Service and maintenance | Looking forward to know more |
| :---: | :---: |
| a) Low maintenance costs <br> - 'Affordable and low maintenance. '(S7 Haiti North rural) | a) Want to learn more about this technology |
| - 'It would be better to have panels because you only have to pay 300 gourdes (US\$7) a year to maintain it and the panel will last 25 years.'(S8 Haiti Centre rural) <br> - 'I don't have any additional expenses only the small fees to replace or charge the batteries every 3 years. The water needs to be replaced every 10 months.'(S8 Haiti Centre rural) <br> b) Easy to find people to give service | - 'We are happy with this initiative and would love to see that technology in the near future. We have sun in abundance and it would be easy for us to take advantage of solar energy.'(S8 Haiti rural) |
| - 'I don't need much maintenance and any one can do it.'(S8 Haiti Centre rural) <br> - 'I have a brother who is an electrician and he is called to repair the batteries for the solar panels around here.'(S8 Haiti Centre rural) | - 'I want to know how they can be used in the house.'(S11 DR South rural) <br> - 'I was surprised when I asked a man what he had them for and he said that just for light bulbs.'(S12 DR North rural) |

### 4.2 Measures to Deal with Robbery or Damage of Sustainable Energy Products

Security and damage control were concerns raised by the Recipients regarding sustainable energy products. Vandalism and theft seem to be a problem in both Haiti and the Dominican Republic, either because people need the items or because of envy. Therefore, securing their investment is a priority. People who do not have a panel said that if they were to spend such a significant amount of money to acquire a solar panel, they would need to spend extra money to secure it. Some participants that already own a solar panel have addressed these problems by paying for metal frames and locks to hold the panels, by hiding the items or simply by moving the panels indoors at night.
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## Risks of Robbery and Damage

a) Panels are easy to steal

- 'Panels are easy to steal.'(S7 Haiti North rural)
- 'You have to be careful here because they steal and it's a risk. That's why you need a warranty in case it gets damaged.'(S11 DR South rural)
- 'You put it on the roof and a kid will steal the panel. They steal the batteries from the inverter. They break the iron bars and steal them.'(S12 DR North rural)
b) Thieves are resourceful
- 'They come at night or early in the morning. There are some places where the panel is stolen even with protection; they are very cunning.(S9 Haiti urban)
- 'Even if you hide them after hours it doesn't stop them from stealing it! One person near my house got hers stolen. One person even came with stairs to steal it. They are prepared.'(S9 Haiti Centre urban)
- 'Even if you install the panel on the second floor they will cut it into pieces and take it. The thieves cut the metal fence with a saw; Haitians don't joke!'(S9 Haiti Centre urban)
c) Need to put extra security with iron grill and lock
- 'Someone tried to take my solar panel from the roof of the house but I had it secured well with an iron grill.'(S8 Haiti Centre rural)
- 'They steal but not too much although I'd have to put a lock on it or have an iron grill made to protect it.'(S11 DR South rural)
- 'You buy an inverter and two batteries and have to pay for an iron cage with a lock. But you leave your house and they break it and sell the batteries for US\$200 pesos (US\$6) when it costs US\$8,000 pesos (US\$230 ).'(S12 DR North rural)
d) Easy to get damaged
- 'Every day things are lost or damaged but people don't talk about those things.'(S7 Haiti North rural).
- 'Not only can they get stolen they are also easy to damage because they are made of glass. Glass breaks easily.'(S7 Haiti North rural)
- 'It's easily damaged.(S12 DR North rural)
e) Should hide it
- 'If the house has people in it the panel and the house are secure. It's secure but you can't put the panel in an accessible place.'(S7 Haiti North rural)
- 'It's not easy to take but it also depends where you put it.'(S7 Haiti North rural)
- 'The solar panels cannot be out of my house too long. I have to hide it. Every morning I put it on the sun and after 5pm I put it inside. If I forget about it, then I might have problems.'(S9 Haiti Centre urban)


## f) They steal it because they need it

- 'They don't damage it. They really want to have it, so they take it trying not to break it.'(S9 Haiti Centre urban)
- 'The only reason they take them is because they don't have electricity at home, it becomes a luxury that everyone wants.'(S9 Haiti Centre urban)
g) They steal or damage it because of envy
- 'It is more because of envy. When they see it they want to go and take it.'(S9 Haiti Centre urban)


## 5. Presentation of Sustainable Energy Products

Eight solar powered items were presented during each of the focus groups, plus an additional thermal product. Each product was introduced individually with a picture of the item and its major characteristics. First, participants gave their positive and negative opinions about it based on these questions: Would it satisfy the needs of your family? Would you like to get this product for them? Why yes/no? Second, they were asked how much money they would be willing to invest in these products. The idea was to understand price elasticity. Third, the actual price was announced to them and they were asked to give their opinion on that price and indicate whether they would buy it or not at that price.
The exercise described above was carried out with each of the eight products. At the end, participants were asked to give their final assessments and decide which product would better suit the needs of their families.
"Most preferred"
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Among Recipients in Haiti and the Dominican Republic, there is a huge demand for sustainable energy products. People said that although they lack the money and unemployment rates are high in their countries, they would find a way to obtain these products.


It was interesting to discover that both the Remitters and the Recipients made similar choices when listing the products that would most satisfy the needs of the final user. However, it should be made clear that this list would have been different if two variables for each product were different: price of the products and the amount of energy output. It was no surprise to see that participants chose the two most affordable items as their first choice. They felt that while the Solar Radio, Flashlight, Cell Charger and the Solar Lantern only met some of their needs, the prices were so affordable that they would be willing to buy them even if they had to pay for them on their own. The product that appealed to the overwhelming majority of the participants was the Solar Lighting Kit. The only reason it was not one of the most popular items on the list is simply because the price is too high and it did not offer enough energy to power other household items.

The least popular products were the TV and the Solar Water Heater, not only because Recipients felt that the price was too high but also because a majority felt that heating water to take a shower was not a priority in their countries. The Solar Water Purification Equipment had a lot of positive reviews until participants learned about its high price and the small amount water it purifies in a day.

## 5.1 "Most Preferred" Sustainable Energy Products

## A) Radio, Flashlight and Cell Phone Charger

This item was popular and well received by all participants. The simplicity of the design and the number of services it provides made this product a must-have item. The statement: 'It's important because of all that it offers', is representative of the sentiments expressed in all of the groups. What made this product even more desirable was its affordability, at US\$35 the price seemed reasonable to all participants. Another factor that made the product desirable was not having to replace batteries due to the integrated solar panel and the hand held crank that are used to power it. Those who were not interested already owned a hand held radio or felt that a flashlight would be easy to find in a store, and they felt cell phone chargers were not that important. Some participants in Haiti had seen something similar to this product. The final conclusion by the majority of the participants was that they would buy this product with or without the financial assistance of the Remitters as long as it is made easily available where they live.

| Radio, flashlight and cell phone charger: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) All services are very practical <br> - 'Yes, I like it because we don't have anything to charge our phones. It also gives you information with the radio and at night we can have light too.'(S7 Haiti North rural) <br> - 'I will buy it now even though I have electricity.'(S8 Haiti Centre rural) <br> - 'It's good because it gives many services. I like it a lot.'(S9 Haiti Centre urban) <br> - 'It's useful because everything is necessary.'(S11 DR South rural) <br> - 'I haven't watched my program for a month and it's something I need. With the radio I can listen to my program, to music and to the news.'(S11 DR South rural) <br> - 'Very interesting because it has a light, and can be used to charge the mobile phone, it's a good idea.'(S12 DR North rural) <br> - 'When there's a power outage this would be good. I like the phone charger.'(S12 DR North rural) <br> b) Great for rural areas, to go camping, for emergencies <br> - 'It's good because when we have storms the radio can give us access to the news.'(S7 Haiti North rural) <br> - 'This would be helpful in places where there is no electricity.'(S8 Haiti Centre rural) <br> c) It's a cheaper alternative <br> - 'Yes, I'm interested. It's very good, In Haiti we have sun and it's a free resource.'(S8 Haiti Centre rural) <br> - 'It's very good because you don't need electrical power and you can have light, and charge the phone.'(S11 DR South rural) | a) I do not need it <br> - 'I don't like it because we can charge (the mobile phone) with the inverter.'(S10 DR StoDom urban) <br> - 'I don't like using mobile phones. I was attacked once and the only thing they stole was the mobile phone.'(S10 DR StoDom urban) <br> - 'The mobile phone lasts a long time charged.'(S10 DR StoDom urban) <br> - I know it has a radio and a charger, but I don't like it anyway.'(S10 DR StoDom urban) <br> b) I prefer other solar products <br> - Il like this product because it works like a flashlight but it's not a priority.'(S10 DR StoDom urban) | a) About coverage and battery length <br> - 'That is good. Is it available now? I want to get it right now.'(S7 Haiti North rural) <br> - 'Does it have an alarm?'(S9 Haiti urban) <br> - 'Can it charge cell phones and does it really have a radio? It's difficult to give a price because we don't see it around here.'(S9 Haiti Centre urban) <br> - 'Without taxes or anything? If they send it they pay for shipping?'(S12 DR North rural) |


| Spontaneous Answers on Pricing: Radio, flashlight and cell phone charger | Comments after knowing the actual price: USD US\$35 |
| :---: | :---: |
|  | Positive |
| \$20/\$35/\$40/\$50/\$100 <br> (S7 Haiti North rural) | a) Excellent price <br> - 'Oh! Good price. Yeah, yeah, that's really good.'(S7 Haiti North rural) <br> - 'Not bad because in the rural zone you need batteries for flashlights and it ends up costing more than US\$30USD.'(S8 Haiti Centre rural) |
| $\begin{gathered} \$ 150 / \$ \$ 250 / \$ 300 / \$ 700 \\ \text { (S8 Haiti Centre rural) } \end{gathered}$ | - 'Not expensive, it's good.'(S9 Haiti Centre urban) |
|  | - 'Oh, that's good! It's affordable at that price.'(S10 DR StoDom urban) |
| $\$ 20 / \$ 30 / \$ 50$ <br> (S9 Haiti Centre urban) | - 'After knowing the price I'm interested, because that's what we're looking for, something good and cheap.'(S10 DR StoDom urban) <br> - 'Wow! That's a good price.'(S11 DR South rural) |
| \$100/\$200 (S10 DR StoDom urban) | - 'We need to find a job to make money to buy one. US\$35 is good for poor people.'(S11 DR South rural) <br> - 'It's almost free. I'm interested in that, because of the price and because of the features it has.'(S12 DR North rural) |
| \$50/\$100/\$150/\$200 <br> (S11 DR South rural) | - The price is good and it gives you three services. It's good.'(S12 DR North rural) |
|  | b) I would buy it for me, as a gift, and for many people |
| \$80/\$150/\$225/\$300/\$400/\$500 <br> (S12 DR North rural) | - 'I would buy it for my relatives that live outside of town but not for myself.'(S8 Haiti Centre rural) |
|  | - 'It would be better if it was US\$30 and at US\$20 we will all get it.'(S7 Haiti North rural) <br> - 'OK! That's good. Oh, yes I would buy it.'(S8 Haiti Centre rural) |
|  | - 'It's interesting. I would use that.'(S8 Haiti Centre rural) |
|  | - 'I like the radio and that you can charge the cell.'(S9 Haiti Centre urban) |
|  | - 'Fantastic. Scientists are fixing our electrical problems.'(S11 DR South rural) |
|  |  |

B) Solar Lantern

The solar lantern was a clear winner among the products presented to Recipients in both Haiti and the Dominican Republic. The lantern technology in itself is not a novelty since similar models have been used in both countries for a long time. What makes this product desirable is that it includes solar technology. The only concern that was raised was whether it would be easy to replace the light bulbs. With older models of lanterns people know that either they need to buy new batteries or get gasoline, and both of these are easy to purchase locally. People were concerned that replacing the bulb might be impossible if it is damaged. Regarding the cost, participants were pleased with the market price of US\$27.50. When compared to the solar panel, the solar lantern is viewed as a much more affordable way to provide light: 'This is important for the person who cannot afford to buy a panel or inverter.'

| Solar Lantern: Before knowing the actual cost |  |  |
| :---: | :---: | :---: |
| Product | Like | Dislike |
|  | a) It is an attractive product <br> - 'That's more interesting.'(S10 DR StoDom urban) <br> - 'Sweet.'(S11 DR South rural) <br> - 'Delicate and pretty.'(S11 DR South rural) <br> - 'Perfect.'(S11 DR South rural) <br> - 'Very good and interesting.'(S12 DR North rural) <br> b) It solves electricity needs well <br> - 'Regardless of the bulb replacement problem it would work for my needs.'(S8 Haiti Centre rural) <br> - 'It's good when you walk in the night.'(S9 Haiti Centre urban) <br> - 'It's moveable, portable, and can be transported.'(S12 DR North rural) | - 'The only problem is the bulb. What happens when you need a new bulb? Where would you buy it?'(S8 Haiti rural) <br> - I have a friend who has something like that (lantern) but he can't use it because he can't buy a bulb.'(S8 Haiti Centre rural) <br> - 'It is good but if someone already bought the solar panel they will not be interested in that.'(S9 Haiti Centre urban) |


| Spontaneous Answers on Pricing: Solar Lantern | Comments after knowing the actual price: USD US\$27.50 |  |
| :---: | :---: | :---: |
|  | Positive | Negative |
| $\$ 3 / \$ 5 / \$ 10 / \$ 15 / \$ 20 / \$ 25$ <br> (S7 Haiti North rural) | a) It solves electricity needs well <br> - 'It's useful. Everything you are showing is useful.'(S7 Haiti North rural) | a) Too expensive <br> - 'That's too expensive. You should charge US\$15.'(S7 Haiti North rural) |
| \$5/\$30/\$40/\$50 <br> (S8 Haiti Centre rural) | - 'Not bad. I would be interested in buying it.'(S8 Haiti Centre rural) | b) Other priorities |
| \$20/\$25/\$30/\$40 <br> (S9 Haiti Centre urban) | - 'When there is a problem like a blackout I would use it.'(S8 Haiti Centre rural) <br> - 'We have sun all the time and when there is no electricity we can use it.'(S8 Haiti Centre rural) | - I would rather get the radio than this because it works better.'(S7 Haiti North rural) |
| \$20/\$30/\$35/\$40/\$50 (S10 DR StoDom urban) | - 'We can use it when we go out to rural areas.'(S8 Haiti rural) | c) Can't be charged without sun <br> - 'The incentive for this device is that it |
| \$15/\$20/\$30/\$40/ (S11 DR South rural) | - 'It needs sun, but here there's no problem because it never rains.'(S11 DR South rural) | charges itself but if there's no sun there's no light because it can't charge without sun.'(S11 DR South rural) |
|  | b) It is an attractive product | - 'It doesn't work without sunlight.'(S11 DR |
| $\begin{gathered} \$ 12 / \$ 18 / \$ 20 / \$ 35 / \$ 40 \\ \text { (S12 DR North rural) } \end{gathered}$ | - 'It is exactly what I said. It is good.'(S9 Haiti Centre urban) | South rural) |
|  | - 'At that price I'm interested.'(S10 DR StoDom urban) <br> - 'Sweet! Pretty! It's very good.'(S11 DR South rural) <br> - 'Wonderfu!!'(S12 DR North rural) |  |

## 5.2 "Sometimes Preferred" Sustainable Energy Products

A) Lighting Kit

This product generated a lot of interest among many of the participants because they all agreed that, light is the most important product.' But there were two clear reasons why people would not consider purchasing this product: the price and the amount of output it provides. Recipients commented that it is an innovative technology they are familiar with and that it is something they would like to acquire, however, when they discovered the market price of the kit, they felt that it was unlikely that they would be able to afford it. Regarding the output, participants liked that it provided light, however, they said they would prefer to buy a product that had more capacity: 'It would be nice to have the refrigerator connected to solar energy. You need a large inverter and several large solar panels - more than one - to have the refrigerator running.' Regardless of its limitations, most participants agreed that given the chance, they would like to have this kit because it would solve some of their important energy needs.

| Lighting kit: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) It solves electricity needs well <br> - I'm always in the dark so it would be great.'(S7 Haiti North rural) <br> - 'I personally think that it would be good if all of the farmers had them (solar panels).'(S8 Haiti Centre rural) <br> - 'I think 6 bulbs are sufficient.'(S8 Haiti Centre rural) <br> - 'For just getting light it's enough.'(S8 Haiti Centre rural) <br> - 'If it's the only source (energy) in town I will make the sacrifice to buy it.'(S8 Haiti Centre rural) <br> - 'It's good because it is exactly what we are talking about, if everyone had the chance to get one it would change our lives.' (S9 Haiti Centre urban) <br> - 'This is what we are talking about; this is exactly what we need.'(S9 Haiti Centre urban) <br> - 'Important because we'll have light.'(S11 DR South rural) <br> b) It is an attractive product <br> - 'It's good and beautiful. It would be great if you give me one right now.'(S7 Haiti North rural) <br> - 'It seems interesting.'(S10 DR StoDom urban) <br> c) It is a better alternative than candles and lamps <br> - 'It would be good for me because right now I use candles every day.'(S7 Haiti North rural) <br> - 'If you have electricity even if it's just for light I'd like that because I'll save on gas that I use for the lamps.'(S11 DR South rural) <br> - 'The solar panel for light so we don't have to use candles.'(S11 DR South rural) | a) It is has too few watts <br> - 'It's small. We can start with this but people will need to buy 5 to meet their needs.'(S9 Haiti Centre urban) <br> - 'It's not enough. This doesn't solve anything. It doesn't produce electricity. It's like a candle.'(S10 DR StoDom urban). <br> - 'Not for me. I have an inverter and can use the computer and the television. It's not for me.'(S12 DR North rural) <br> - 'If I had a problem with electricity, but I don't anymore.'(S12 DR North rural) <br> b) It is limited to lighting, we need energy for other things <br> - I think that it's positive but I would only buy if it charged the refrigerator instead of 6 bulbs.'(S7 Haiti North rural) <br> - 'We need light but we also need other stuff to work because we also want to watch TV and have a refrigerator.'(S7 Haiti North rural) <br> - 'It's really good as long as I can watch television and use the refrigerator along with the light,'(S7 Haiti rural) <br> - 'It's good but not a necessity because we need more than light; we need the refrigerators and the fans.'(S8 Haiti Centre rural) <br> - 'What I want is for the fan to work and the television. With my inverter I only turn on the fan and the television. I never waste it on a light bulb.'(S10 DR StoDom urban) <br> - 'The panel is good for light but not for the fan or the refrigerator. I'd be interested, but l'd also have to use the public electricity for the refrigerators and other appliances.'(S11 DR South rural) <br> - 'The television. Oh, no, if the television and the radio don't work, no.'(S12 DR North rural) | a) About capacity <br> - 'Do you have one with more capacity? '(S7 Haiti North rural) <br> - 'How many watts? This does not sell on just looks, you need the specifics.'(S9 Haiti Centre urban) <br> - 'One question. Can this be used to turn on a fan or the television?'(S10 DR urb) <br> - 'How long does the light work?'(S11 DR South rural) <br> - 'Does the bulb have to be 60 watts?'(S11 DR South rural) <br> b) About the need of sun <br> - 'The problem is that it rains a lot and you can't use the sun because there isn't much. It can last only two hours.'(S12 DR North rural) |

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## B) Solar Cooker

This product received an equal amount of positive and negative comments from all groups in Haiti and the Dominican Republic. Responses to the cooker also reflected a distinct gender division because women were much more excited about this particular product than men (as illustrated by the number of smiles that appeared on the faces of the women participants, and the 'Wow! Wow!' and 'That's good' comments that were made when the product was introduced). One man simply stated, 'Women are interested in this, not me.'

Those who loved the product focused on its portability with comments like, 'We can go outside and use it to cook,' and on the possibility of cooking without having to pay for gas, charcoal, or wood. Several people mentioned that it could serve as a back up source of energy. However, those who did not like the cooker felt that it was too small, that it took too long to cook food, and that it would force people to cook their meals with steam when they clearly prefer to fry their food. Overall, participants were curious about this technology and felt that it would be a good alternative for cooking purposes. The price was a concern for most of the participants because they thought that US\$190 was too much money for this type of technology, especially when it was a technology they feared might not work for them on a cloudy day.
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## C) Efficient Wood Burning Cooking Stove

This product had an interesting response from all groups. A large number of the participants liked the wood burning stove because it is a system they understand and are familiar with. Those who liked it were happy with the design and liked the fact that it was a safer alternative, as a participant in Haiti explained: 'It's important. It looks like it emits fewer fumes in the face. It's more modern and less charcoal is used, so it's good.' Those who had concerns about the environmental impact of this stove forgot about their arguments when they learned the price. A Dominican participant stated: 'Of course, the use of wood and charcoal mortifies me, but I'd use this device.' The majority of the participants thought that the market price of US $\$ 40$ was affordable and that it made this product attractive to them. A minority, especially in Haiti, felt strongly that any use of wood is unacceptable and said: 'I don't want to use wood because we need to solve the deforestation problem.'

| Wood burning cooking stove: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) Pro-environment alternative <br> - 'We moved to using briquettes because there is nothing we can find here.'(S8 Haiti Centre rural) <br> - 'It would be good for us because we can use briquettes which will help us avoid using wood. This will help us address our deforestation problem.'(S8 Haiti Centre rural) <br> - 'I produce my briquettes with garbage. If you can't find the briquettes you can make your own.'(S8 Haiti Centre rural) <br> b) Reduces the cost of using gas, wood, and charcoal <br> - 'I don't like using charcoal or wood but since this reduces the consumption of both its good for us.'(S8 Haiti Centre rural) <br> - 'Where we live and work it would be useful. Charcoal is too expensive, if we have a better stove we can save.'(S9 Haiti Centre urban) <br> - 'The advantages are: it consumes less charcoal, reduces the heat and is more sophisticated.'(S9 Haiti Centre urban) <br> - 'I wouldn't have to buy gas so that would mean saving a lot and it's cheap.'(S11 DR South rural) <br> - 'Of course I'd buy it because it's handier and cheaper.'(S11 DR South rural) <br> - 'It helps a lot to save on gas. If I could, I would buy it.'(S12 DR North rural) <br> - 'I don't care, but wood is cheaper because we can get it by the river'(S12 DR North rural) <br> c) I like its portability <br> - 'It's good for the countryside.'(S10 DR StoDom urban) <br> - 'Excellent because it's needed.'(S11 DR South rural) <br> - 'It looks handy and can be used with coal or wood.'(S11 DR South rural) <br> - 'It's good for the river, the beach, and for everyday.'(S12 DR North rural) <br> - 'For patios or by the river.'(S12 DR North rural) <br> d) Healthier way to cook <br> - I'm interested and would buy it even though I'm not a cook.'(S8 Haiti Centre rural) <br> - 'It's good because when I cook with charcoal there is a lot of heat and fumes, this one looks like it would spew less fumes and heat on me.'(S9 Haiti Centre urban) <br> - 'Less fumes and when it rains instead of having it outside I can have it indoors.'(S9 Haiti Centre urban) | a) It is bad for the environment <br> - 'If I could use rocks in it I will take it. Not if it uses wood.'(S7 Haiti North rural) <br> - 'We have all the cyclones because we are cutting the trees. We need solar power not this.'(S7 Haiti North rural) <br> - 'We don't like to cut the trees. '(S7 Haiti North rural) <br> - 'No, no, not this product.'(S7 Haiti North rural) <br> - 'Wood? Oh!'(S10 DR urb) <br> b) I already have a similar product <br> - 'I already use something similar.'(S7 Haiti North rural) <br> - 'I have an electric stove. I don't like this one.'(S10 DR StoDom urban) <br> c) I don't like to cook with briquettes <br> - 'I don't now about the briquettes.'(S7 Haiti North rural) <br> - 'I don't like it because I don't want to use wood or coal. I also don't want the smoke because that makes life too complicated.'(S10 DR StoDom urban) | a) How long does it last? <br> - 'How long does it last?'(S8 Haiti rural) <br> b) How does it work? <br> - Ineed more information on this.'(S9 Haiti Centre urban) <br> - 'Where does the smoke go? '(S10 DR urb) <br> c) Does it come with briquettes? <br> - 'Does it come with the briquettes that it used or is that additional?'(S7 Haiti rural) <br> - 'It's a good product but does it come with the briquettes.'(S8 Haiti Centre rural) |

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## 5.3 "Least Preferred" Sustainable Energy Products

## A) Solar Water Purification Equipment

According to the majority of Recipients, water purification is a necessity and it is not available. The infrastructure in both countries is limited when it comes to providing electricity and clean drinking water. All Recipients agreed: 'We can't drink the water because it's not treated. It's dangerous to do so.' Buying bottled drinking water is a necessity for all people, even for big businesses like hotels. However, those who can't afford bottled water have to drink whatever water is available. When the water purification system was presented they all agreed that: 'It's a good thing because it would reduce typhoid, diarrhea, and other sicknesses.' People from the towns that had more reliable electric power were much more interested in purchasing this system than anything else. However, their perception of the benefits of having access to safe drinking water to avoid illnesses, and the promise of not having to buy gallons of water on a daily basis was quickly overlooked when they found out the cost of this product. The majority thought that the price was much too high. There were those who were willing to pay the US $\$ 480$ if the device produced a larger volume of clean water. However, most people thought that this product did not meet their needs because the amount of water it produced was not sufficient. They also felt that even though it is inconvenient to buy drinking water by the gallon, the price of doing so was more economical than purchasing this product. The overall feeling was that, 'It is important but it is too expensive.'
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## B) Solar Water Heater

Of all of the products viewed, this was the least popular. The majority of Recipients concluded that this product was a luxury. Participants claimed not to mind taking cold showers sometimes, especially since the climate is warm year round; the sun heats the tanks and so showers during the day are usually with very hot water. The prices suggested were, on average, quite close to the actual cost. However, the consensus was that this item is not needed.

| Solar water heaters: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) Goof for the mornings and winter months <br> - 'Hot water maybe for the morning.'(S7 Haiti North rural) <br> - 'It's important for us sometimes to have hot water especially in January when it's cold.'(S8 Haiti Centre rural) <br> - 'It would be good now that the cold weather is coming.'(S11 DR South rural) <br> b) It could help to eliminate illnesses <br> - 'It would be important to get it because it would help us to eliminate infections.'(S8 Haiti Centre rural) <br> c) It would be nice to have <br> - 'If it's not too expensive, I would be interested but it's not a need.'(S7 Haiti North rural) | a) It is not a need <br> - 'What would I need hot water for? I don't use it and I'm not in the habit of using hot water.'(S8 Haiti Centre rural) <br> - 'It's good, but ...umm... not necessary.'(S9 Haiti Centre urban) <br> 'Here we don't use hot water at all, because the sun heats the water tank. Only the old and sick use hot water. It's very hot here and we don't use the water heater.'(S10 DR StoDom urban) <br> - 'You can't shower at noon because the water is too hot. '(S11 DR South rural) <br> b) This is not a priority because I prefer cold showers <br> - 'It's very hot here and we like to have cold water not hot.'(S7 Haiti North rural) <br> - 'I have an electric heater and I only use it three months out of the year, but some people never use it.'(S10 DR StoDom urban) <br> - 'It's good but we don't use it. It's not necessary.'(S11 DR South rural) <br> - 'Oh. For bathing. I love cold water.'(S12 DR North rural) <br> c) I don't know or trust this technology <br> - I'm not sure of the usage and it's not a need for me.'(S8 Haiti Centre rural) <br> - 'Not interested because I don't know this technology. We would need it mostly at night when there is no sun. It probably won't work.'(S8 Haiti Centre rural) | a) Does it work all day? <br> - 'Can I use it at night when there is no sun?'(S8 Haiti rural) <br> - 'Is it for hot water in the morning or for all day long?'(S7 Haiti rural) |


| Spontaneous Answers on Pricing: Solar Water Heater | Comments after knowing the actual price: USD US\$300 |
| :---: | :---: |
|  | Negative |
| \$25/\$30/\$120/\$150/\$350/\$400 | a) Do not need it at all |
| (S7 Haiti North rural) | - 'We don't need it.' (S7 Haiti North rural) |
| $\$ 30 / \$ 75 / \$ 200 / \$ 300$ <br> (S8 Haiti Centre rural) | - 'No! I wouldn't buy it because it's never cold. Not this one. The weather is hot here and we don't need it.'(S11 DR South rural) <br> - 'Wow. No, no! I don't think so. I like cold water.'(S12 DR North rural) |
| $\$ 30 / \$ 50 / \$ 100$ (S9 Haiti Centre urban) | b) Only certain type of people can afford it; it is too expensive <br> - 'Too expensive.'(S7 Haiti North rural) |
| \$40/\$100/\$100/\$300 <br> (S10 DR StoDom urban) | - 'The ladies will certainly buy it because they are afraid of cold water.'(S8 Haiti Centre rural) <br> - 'No. Umm... It is for some important people, but for us it's not important.'(S9 Haiti Centre urban) |
| \$100/\$400/\$450/\$500 (S11 DR South rural) |  |
| \$120/\$180/\$300/\$400/\$520 <br> (S12 DR North rural) |  |

## C) Solar TV

In Haiti and the Dominican Republic, there are very few pastimes that are considered almost a necessity, but watching television is one of these guilty pleasures. When this product was introduced it immediately generated excitement and positive comments. However, the more that Recipients learned about its capacity and cost, the less convinced they were about splurging on this product. Those who liked it felt that it took too long for it to charge and that it did not produce enough television watching time. One person stated that, 'I don't like it because it has to charge for a long time for only three hours of use'. Those who continued to like the product even after learning how long it took to charge were less enthusiastic about it when they learned the price. The majority of people concluded that it was too expensive.

| Solar TV: Before knowing the actual cost |  |  |  |
| :---: | :---: | :---: | :---: |
| Product | Like | Dislike | Information requested |
|  | a) At least, we would watch TV: soap operas, news <br> - 'That's good. If it really stays on for 3 hours it would be good.'(S8 Haiti Centre rural) <br> - 'We could watch TV.'(S9 Haiti Centre urban) <br> - 'I watch the first and the last, the middle ones don't count. I sit down to watch my programs from 7 to 11 at night.'(S10 DR StoDom urban) <br> a) I do not need to use electricity <br> - 'Everything you have is interesting because we need it all. With this product even if we don't have light at least we can watch TV.'(S7 Haiti North rural) <br> - 'We have a TV set as a luxury because we don't use it since we don't have electricity. Our televisions are only to look good and to collect dust.'(S9 Haiti Centre urban) <br> - 'It's good because you can watch your programs and the news without using electricity.'(S11 DR South rural) <br> b) It is interesting and I would like one <br> - 'It's really interesting.'(S7 Haiti North rural) <br> - 'It's good and interesting.'(S9 Haiti Centre urban) <br> - 'O.K. Great! Wow!'(S11 DR South rural) <br> - 'I'd like to have one in each room if I could.'(S12 DR North rural) | b) Output is not long enough <br> - 'My program lasts 6 hours so it's not even enough for that.'(S10 DR StoDom urban) <br> - 'I can't use this TV for playstation because I need more time than it offers.'(S10 DR StoDom urban) <br> c) Not for this country <br> - 'Very nice and pretty, but it doesn't work for this country.'(S12 DR North rural) <br> d) Must be expensive <br> - 'I have a price in my mind but it's probably not right.'(S7 Haiti North rural) <br> - 'Anyone would be interested but money is scarce.'(S11 DR South rural) | a) Is it a kit of TV and panel? <br> - 'Does it come with the TV? Is it a kit?'(S7 Haiti rural) <br> - 'Does this work for an ordinary TV or do you have to buy one just for the solar panel?'(S10 DR urb) <br> b) Does it have video players? <br> - Il like it. Does it have video cassette players in it?'(S9 Haiti urban) |


| Spontaneous Answers |
| :---: | :--- | :--- |
| on Pricing: Solar TV |$\quad$ Comments after knowing the actual price: USD US\$900

### 5.4 Sustainable Energy Products that Best Suit Family Needs

After all the products had been viewed and Recipients were aware of the actual prices and characteristics of each product, the majority of Recipients indicated that they preferred the cheaper more mobile solar items.

|  | Radio/Flashlight | Solar Lantern |
| :---: | :---: | :---: |
| Most Preferred | - 'The radio works for when you're in the country and you can charge the mobile phone.'(S10 DR StoDom urban) <br> - 'I like it because I can charge the mobile phone and I can use it to listen to my program and the news, listen to music and drink a beer.'(S11 DR South rural) <br> - 'I like it because I live on the street and I like to listen to music.'(S12 DR North rural) | - 'This would be important and useful when we have a blackout.'(S8 Haiti Centre rural) <br> - 'It's important and handy if the electricity goes out you can charge it anywhere.'(S11 DR South rural) <br> - '...because it's portable.'(S12 DR North rural) |


|  | Solar Lighting Kit | Solar Cooker | Wood Burning Stove |
| :---: | :---: | :---: | :---: |
| Sometimes Preferred | - 'Solar lighting panels are number one. Television and flashlights are also my favorites.'(S7 Haiti North rural) <br> - 'We need light.'(S8 Haiti Centre rural) <br> - 'There are times when we can spend two days without electricity. I will need the panels on those days.'(S8 Haiti Centre rural) <br> - 'They're all important but for me this is the most important.'(S11 DR South rural) | - 'It's a great way to save time and money.'(S10 DR StoDom urban) <br> - 'You just have to put it there and don't have to do anything else.'(S10 DR StoDom urban) <br> - 'You can go to Peking and it won't burn.'(S10 DR StoDom urban) <br> - 'It's healthier not to eat food prepared with gas.'(S10 DR StoDom urban) <br> - 'Since I use the oven for my favorite food, I can cook chicken and pork.'(S11 DR South rural) <br> - 'The solar oven and the stove to use when I run out of gas, and for the river or the beach. The wood stove for the patio or the river.'(S12 DR North rural) <br> - 'This covers many needs. I save gas and it's convenient. It's for steaming.'(S12 DR North rural) <br> - 'There are none here, but there are in the rest of the country. I'll take the oven. The oven, half for me, half for you.'(S12 DR North rural) | - 'Less charcoal and less wood is good.'(S8 Haiti Centre rural) |


|  | TV | Purification | Water Heater |
| :---: | :---: | :---: | :---: |
| Least Preferred | - 'We have to negotiate the price.'(S8 Haiti Centre rural) <br> - 'Ooooh! (crosses herself), that's a lot and you have to think about it before you buy this.'(S10 DR StoDom urban) <br> - 'In this case I'll pay more than what I gain.'(S10 DR StoDom urban) | - 'This is a good product because it will help us eliminate fevers and sickness. The water is not normal; we need this to help us.'(S8 Haiti Centre rural) <br> - 'Everyone would buy it if it was less expensive.'(S8 Haiti Centre rural) <br> - 'Purification of water is the most important.'(S9 Haiti Centre urban) <br> - I'd buy it because I'll save many years of buying gallons of water because I'll have it for a long time.'(S11 DR South rural) <br> - Because it represents savings for the household. I have to buy a bottle. It's expensive, but I like it.'(S12 DR North rural) | - 'Take off a zero and we can talk.'(S7 Haiti North rural) <br> - 'More important for us is the light and the purified water. We live in a tropical country, it is not necessary to have hot water.'(S9 Haiti Centre urban) <br> - 'That's a lot and I'm not interested.'(S10 DR StoDom urban) |

### 5.5 Control vs. No Control Over the Use of Remittances

| Wants Control | Do Not Want Control | How can I get the product? |
| :---: | :---: | :---: |
| a) Prefer they buy the product <br> - I would prefer that they buy it there for me where I can to pick it up at the store because if they send me the money I will use it on something else.'(S8 Haiti Centre rural) <br> - 'My friends and family living in NY and France send me money and I distribute the money to the rest of my family living here. I'm like an agent, a mini Money Gram.'(S7 Haiti North rural) <br> - If they send money these things are not a priority since there are 300,000 more urgent things to pay for such as school, electric bill, etc.'(S10 DR StoDom urban) <br> - I would like the product to be sent because that way it's simpler and I don't get into trouble. If they send the money I may spend it on other things.'(S10 DR StoDom urban) <br> - 'If they send the money for that, I'll buy it. But if there's an emergency, it's different. But if they tell me to spend it on that, I won't spend it on something else.'(S11 DR South rural) <br> - 'Well if they send me the money, there would have to be an emergency for me to spend it.'(S11 DR South rural) <br> - 'If I have a child over there and he buys this over there, I'll tell him that if he likes it, he should send it.'(S11 DR South rural) <br> - 'I'd use the money for something else.'(S11 DR South rural) <br> - 'Yes, of course. I'd like to have the flashlight sent from there.'(S12 DR North rural) <br> - 'If they send me the money and something else comes up, I'd spend it on what I need.'(S12 DR North rural) <br> 'I want them to send me the light because I can use the money for other things. I want the product sent.'(S12 DR North rural) <br> b) Would buy the product if they send the money and ask me to <br> - 'If they send money there's always something I need. But if they send the money, I'll buy it because I use the money the way they tell me to.'(S12 DR North rural) <br> - 'If they send money, I'll buy the product; I'll buy something for my house. But if they send the money, it's for the product. You can't touch it.'(S12 DR North rural) | a) They will get me the wrong thing <br> - 'It s my decision if I buy it here, if they send it I consider it a gift but if they send me the money it's my choice on how to use it.'(S7 Haiti North rural) <br> - 'The person who sends the money doesn't need to know how I use it.'(S7 Haiti North rural) <br> - 'My nephew has sent me things that I have never used. Four months ago he sent me an appliance that is a television, radio, and light, but it needs a lot of batteries. I used the radio until I ran out of the batteries he sent me. I know that if he sends me money, I'll spend it.'(S10 DR StoDom urban) | How do I get it? <br> - 'I want to know if the person over there buys it will the product be shipped to them or us.'(S8 Haiti Centre rural) <br> - 'If he pays in Boston will I get the product here?'(S8 Haiti rural) <br> - 'If I get a credit to buy one of these things, how do you think that will work with my family abroad.'(S9 Haiti Centre urban) <br> - 'Is it possible to buy something here and for my family to pay for it from there?'(S9 Haiti urban) <br> - 'Is it possible for someone abroad to buy something for us here? And how would they pay?'(S9 Haiti Centre urban) <br> - 'Does this company have headquarters in Haiti?'(S9 Haiti urban) <br> - 'If one of us buy is it here in Haiti how long will it take to repay it?'(S9 Haiti Centre urban) <br> - 'I want to analyze and but it. I do not want to put my faith in them to pay for it. Is it going to happen at the moment that I need it?'(S9 Haiti urban) |

## 6. Models for Linking Remittances to Sustainable Energy Products

Recipient participants in Haiti and the Dominican Republic were shown different financial models for obtaining sustainable energy products. The majority of the participants agreed that the basic scheme of linking the remittance to the product was simple and they all understood the links between the Remitter, the Money Transfer Agencies, and the Recipient of the money.
In the end, two models were clearly preferred: Model 6, in which the Remitter buys the product directly from a vendor


New York and sends it to their family in Haiti or the Dominican Republic; and Model 7, in which the Remitter or Recipient buys the product directly from the vendor in Haiti or the Dominican Republic. These two models allow the Recipient to buy the items directly without using transfer agencies or banks as intermediaries.

It is important to note that Models 1 and 2 were presented from the perspective of the Recipient. In other words, Recipients were asked if they would be willing to open a savings account or take out a loan locally to obtain the products. In general, the response was negative, and when compared to the Remitters' answers, Recipients were even more reluctant to deal with banks or financial institutions. Paying for the product on-line or getting the product from a family member who belongs to an association in New York was a very foreign idea to most of the participants.

Unlike the Remitters, local participants did not care as much about local job creation if sustainable energy products were to be produced locally. Recipients preferred the idea of buying a foreign made product rather than a locally made one. The reasons given were that they trust the quality of a 'Made in the USA' product, that prices are better when products are bought abroad, that a foreign product is original as opposed to local ones that can be fakes, that foreign products come with a guarantee and that there is more product variety when buying abroad. However, Recipients said that they would like the products to be made available locally through branches or stores in their neighborhoods.

## Place of Origin of Sustainable Energy Products

## Foreign product

a) More confidence when products are 'made in USA'

- 'When I buy a product I look for "made in USA" with a registered trade mark, not "made in DR", and if there are two products with different brands, I'll always choose the one "made in USA".'(S10 DR StoDom urban)
- 'If someone is selling a product made in the US here on sale, I'd rather buy it here. But the product has to be made in the US and with a registered trade mark because they are very good.'(S10 DR StoDom urban)
- 'Even Revlon hair products are different if they are from the US. Revlon hair products made here leave your hair stiff. I'll pay more for my shampoo but it has to be American.'(S10 DR StoDom urban)
- 'They should send it from there made in the USA, not made in the DR. I prefer if it's from there.'(S11 DR South rural)
- 'There are things that are better over there than the ones over here.'(S12 DR North rural)
b) Better quality and at a better price when products are bought abroad
- 'It's more expensive here and it's not good.'(S10 DR StoDom urban)
- 'Avon products, for example, are more expensive here and if they are made in the DR they are bad. It's not the same product as in the US.'(S10 DR StoDom urban).
c) Foreign products are original, not fakes, and come with a guarantee
- 'Here there are places you can't trust, and you buy fake products. There's a big cloning problem.'(S10 DR StoDom urban)
- 'There's a company making it here, but people complain because it's not the same.'(S10 DR StoDom urban)
- 'It has to be made there, but bought here so that they give you a guarantee.'(S11 DR South rural)
- 'It comes with a book that teaches you how to use it and if it breaks you call a technician. Dominicans are very good at that.'(S11 DR South rural)
d) More product variety and parts
- 'There are more ways out and more options if the products are made there (US).'(S10 DR StoDom urban)
- 'I prefer if they send the parts from there. I have a lot of trouble finding auto parts.'(S12 DR North rural)


## Model 1: Recipient Buys Sustainable Energy Product with Their Own Savings

In this model, the remittance is sent by a traditional provider from New York - for example a bank or a money transfer organization - to a bank/microfinance institution (MFI) in the recipient country, where the money is put into a savings account that can used to purchase sustainable energy products. Participants were asked if they would open a savings account under their own name in order to buy the product.

Reactions were mixed. Those Recipients who liked this model said that a savings account would facilitate setting a portion of the remittance aside to buy the product. Others liked the idea of not having access to the money received to avoid the temptation of spending it on other things. A savings account would therefore be a safe place to keep this money. Recipients also liked the fact that once the necessary money was saved, they would be able to buy the product themselves and save shipping costs.


Recipients who disliked the savings proposal recognized that having access to the money would make it almost impossible to get the product because they would spend it on something else. Others indicated that they were not so keen on a mechanism that gave the Remitter control over the use of the money. Other participants said that the remittance amount was not enough for them to put a portion into a savings account. They felt that other needs take priority. Other people said that a savings account means paying fees to the bank. They would rather pay the full amount of cash directly to the vendor. Several Recipients complained that this is a complicated model and might even cause problems among families. Concerns were expressed regarding the name that would appear on the bank account and who would have access to the money. If the Remitter opens the bank account under his/her name, then that person will need to make a special trip to the Islands to open the account and another to take the money out. This is an expensive proposition and one they feel would be unattractive to the Remitter and to the Recipient as well.
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| Model 1: Recipient Buys Sustainable Energy Product with Own Savings |  |
| :---: | :---: |
| Like | Dislike |
| a) With the savings account, I would set apart some of the money sent to buy the product <br> - 'Yes, we would like to have it and if I had the possibility I would save a little at a time. It is a good idea.'(S9 Haiti Centre urban) <br> - 'We could open an account at the bank, because with the money it can be opened instantly.'(S11 DR South rural) <br> - 'It's a more convenient way for me because with US\$500 pesos (US\$14 ) you can open an account and if they send me US\$50 I can save US\$25 per month to buy it.'(S11 DR South rural) <br> - 'I can do it on my own, because when they send the money each month I would put it in the account because we can live without the money when they don't send it.'(S11 DR South rural) <br> b) I would not be tempted to spend the money <br> - 'It's good because that way you don't touch the money, you would just get the panel.'(S11 DR South rural) <br> c) They would save in shipping costs <br> - 'It's good for me, because if we have the money here, they save on sending the product.'(S11 DR South rural) | a) I would withdraw the money from the savings account <br> - 'If I have access to the money, I'll take it out and spend it on something else, and not on the product.'(S10 DR StoDom urban) <br> - 'The account has to be in my name because the person that is over there can't take money out here. And I would spend it...'(S10 DR StoDom urban) <br> b) They do not send enough money to save <br> - 'With the small amount they send it's not enough to open a savings account.'(S11 DR South rural) <br> - 'The money is for the house. If we make a plan like that they'll stop sending money. They send it for the home, for food, not for that.'(S12 DR North rural) <br> - 'The money they send is for the house, and there's not enough left over to save.'(S12 DR North rural) <br> c) A savings account means paying fees to the bank <br> - 'I don't like it because I wouldn't open an account since each time you make a deposit, they take money from you.'(S7 Haiti North rural) <br> - 'The bank doesn't work for nothing. You put in your money and when you want to take it out, you get less than what you put in.'(S10 DR StoDom urban) <br> d) I'd rather pay in cash directly with the full amount <br> - I don't like it and if the account is for me to buy something here, I'd rather receive all of the money at once.'(S10 DR StoDom urban) |

## Model 2: Recipient Buys Sustainable Energy Product with a Loan

In this model, the remittance is sent by a traditional remittance provider from New York - for example a bank or a money transfer organization - to a bank/MFI in the recipient country, where the money is put into a loan account that can used to purchase sustainable energy products. Participants were asked if they would take out a loan from a bank in order to buy the product.

The response of the majority to obtaining a loan was overwhelmingly negative. Most people said that they would not qualify for a loan. Banks in general, according to the participants, have a number of requirements that need to be met before giving someone a loan. Having a full time job, owning a business or a property to put down as collateral are conditions that the majority of participants would not be able to meet. Loans are regarded as a service that is only given to big businesses or to wealthy individuals. Recipients pointed out that loans are like a 'puzzle' because of all these conditions, plus the paperwork entailed in setting up a loan. Others said that paying interest on the loan would
make the product too costly. Furthermore, participants feel that banks would not be willing to give out loans for the purchase of sustainable energy products, and some feel that they can afford the sustainable energy product that they like without asking for a loan. Many others said that they would simply not ask for a loan because they do not like them. These comments reflected the views of both Haitians and Dominican participants.


Despite general reluctance to use a loan to buy these products, some participants said they would take out a loan to buy a combination of products (for example several solar panels or panels plus another device). These people said they would ask for a loan from an MFI or from the vendor (but not from a bank) and also said they would need an affordable interest rate to make the loan worthwhile. In summary, participants believe that this would not be a popular model for the general public because not everyone has good credit and a loan would not be easy to secure, whether it was in New York, Haiti or the Dominican Republic.


## Model 3: Remitter Buys Sustainable Energy Product from a Vendor in Haiti/Dominican Republic via a Transfer Agency

In this model, the Remitter selects from among a range of sustainable energy products made available through the transfer agency website or retail outlets. The MTI has contracts with specific energy vendors who, once the item has been purchased, deliver it to the client; it is in effect an in-kind remittance used to purchase energy products directly through the MTI. The Remitter can choose to have the product delivered or picked up at a specific location in the recipient country.

Most Recipients were not very enthusiastic about this model. They said they would prefer to see the product before it was purchased by the Remitter in New York. They also expressed concerns about product delivery in their countries because once the item is paid for in the United States, they said it would be difficult to make the vendor accountable

for delivery or in the event that the product malfunctioned. Some disliked that this system limited choices for Recipients by forcing them to get the product from a specific store when they might prefer to get it somewhere else. And finally, there were participants that simply found the model too complicated.

Some recipients had positive comments about the model. They said they were familiar with this system because they noted that instead of sending money, sometimes Remitters send them food or products via money transfer agencies using this type of a system. They noted that the system is 'proven' in both Haiti and the Dominican Republic and could work for sustainable energy products.

| Model 3: Remitter Buys Sustainable Energy Product from Vendor in Haiti/Dominican Republic via Transfer Agency |  |
| :---: | :---: |
| Like | Dislike |
| a) It is a proven system in Haiti and in Dominican Republic <br> - 'That already exists here, not only in Haiti. My family sends food that way because that system is very common here.'(S10 DR StoDom urban). <br> - 'On the corner near here there are food barrels. They are empty barrels of food that was sent.'(S10 DR StoDom urban) <br> - 'It's good if the agency takes care of the shipping and charges like they do for remittances, and I receive it here. This is good, in fact I bought an oven in the US and the company sent it to me here in the DR.' ${ }^{\prime}$ S11 DR South rural) | a) I want to see the product before being purchased <br> - I want them to send me the money before buying it. I want the money. I want the company to give me the product so that I can see how it works before I pay for it.'(S8 Haiti Centre rural) <br> - 'How can you pay for the product without seeing it?'(S12 DR North rural) <br> b) I wonder how they deliver the product locally <br> - 'They check it there? How do I complain if it doesn't work?' (S9 Haiti Centre urban) <br> - 'I don't like it. You pay first, and then what if the product you ordered doesn't arrive?'(S12 DR North rural) <br> c) Does not allow to buy the product elsewhere <br> - 'I don't like it because if my husband deposits money at Quisqueyana and tells them that they should send the money to Sirena, then I'm limited to buying at that store. I don't want those limitations.'(S10 DR StoDom urban) <br> d) I do not understand it <br> - 'I can't say no because I don't know it, but it's not a bad idea.'(S10 DR StoDom urban) <br> - 'I don't understand.'(S12 DR North rural) |

## Model 4: Remitter Buys the Product Through an Association in New York

In this model, the Remitter purchases a sustainable energy product from an energy company but the interface is the website of the Hometown Association. The Hometown Association vets the various energy partners before agreeing to advertise their products and takes a small fee for providing the service. In this model, the backend is provided by the MTI.

The concept of obtaining sustainable energy products through a family member that belongs to an Association of Haitian or Dominican people living in New York was completely foreign to Recipients. Dominican participants expressed anxiety about getting the product through an Association in New York because of lack of accountability. They said that given the number of intermediaries, the process of receiving the product becomes too long, confusing and expensive. They were skeptical about the effectiveness and responsibility of the Association. In addition, some felt excluded because the model assumes that people have relatives in the United States who belong to an Association, and this might not be the case for many people.

It was not possible to evaluate this model in detail with Haitian Recipients due to their unfamiliarity with the idea of an Association. Recipients in general confirmed that they would prefer to buy the product themselves directly from a local vendor.


Model 4: Remitter Buys Product through an Association in NY
Dislike
a) Too many intermediaries; the process gets long, confusing and expensive

- 'I don't think so. With so many middle-men, the product is delayed.'(S10 DR StoDom urban)
- 'Your family may say that they sent it on Friday, but if it doesn't arrive on time then they will say it's on the boat, and the boat will say it's with customs and to call somewhere else. Then you have to go complain at one place, then another. There's $n$ one to complain to if it doesn't arrive. You waste a lot of time this way.'(S10 DR StoDom urban)
- 'Too many hands. The more hands, the more problems, the more expensive it gets.'(S10 DR StoDom urban)
b) Distrust towards the effectiveness and responsibility of the Association in this process
- 'My brother would have to investigate them.'(S11 DR South rural)
- 'Sometimes people that are over there do one thing in front of you and then give you something else.'(S11 DR South rural)
c) You need to have family in the US for this to work
- 'Why don't they bring the product here so you can see it in a store and you can go and choose it? It's more convenient. Not everyone has connections in the US.'(S11 DR South rural)
- 'If there are only 5 people with families in the US, you'll only sell 5.'(S11 DR South rural)
d) I do not understand it
- 'I wouldn't like that.'(S12 DR North rural)
- 'I don't understand. If it's through a family member or by shipping, then yes.'(S12 DR North rural)


## Model 5: Remitter Buys the Product Directly from a Vendor in Haiti/Dominican Republic via the Internet (using credit card or prepaid card)

In this model, the Remitter purchases a sustainable energy product directly from an energy company but chooses the product on the Internet and pays with either a prepaid card or a credit card. This model also offers the client the option to pay in installments, via layaway (where the equipment would not be delivered until it is fully paid for) or directly in a lump sum (where the equipment would be delivered to the customer immediately).
Model 5: Remitter buys product directly
from VENDOR in Haiti/DR via INTERNET
(using credit card or prepaid card)
website and buys product with credit card or
with prepaid card bought in the US directly.

- Vendor in Haiti/DR gives product to family.

Local Recipients explained that they have a very limited access to computers and when they do, they do not have electricity to turn the computer on. Therefore, buying the products on-line is a remote possibility for them. In addition, several people said that they do not like the internet because they feared that they might get the wrong item. They would prefer to see the products with their own eyes, because on the internet 'the products look big in the pictures and when you get them, they are small."' Other participants repeated the argument that buying via internet is unsafe because their identities can be stolen.

On the other hand, some Recipients said that if the Remitter buys the product on-line, it is fine with them because they trust the choices made by their families abroad. One person said that he had already bought items on-line from abroad, and that they arrived safely.

This model also tested two different payment alternatives: lump sum or lay-away. A majority of people said they would prefer to pay through small installments, and some said that they would like to have the product delivered upfront even if it is not fully paid for. Some said that paying in a lump sum is better because they would rather not get into trouble in case they default on one of the payments.
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## Model 5: Remitter Buys Product Directly from Vendor in Haiti/DR via Internet (using credit card or prepaid card)

a) If the Remitter buys it via internet, it is fine

- 'I don't care. My son does it and he receives what he buys.'(S10 DR StoDom urban)
- 'I like it. It's fast.'(S10 DR StoDom urban)
- 'It's good through the computer because they request it from where it is sold.'(S11 DR South rural)
- 'If it's a family member, I trust them.'(S11 DR South rural)
- 'If I want sneakers, my sister buys them on the internet with her credit card and the send them to me with UPS.'(S12 DR North rural)


## b) Things arrive safely

- 'It looks good to me. I lived in NY and you get a warranty if you buy it there. I've bought things and they arrive safely.'(S12 DR North rural)
a) I do not have access to a computer
- 'I can't use the internet because I don't have electricity for my computer.'(S7 Hait North rural)
- 'If we had access to radio, we could get sports, news, culture. If we had access to internet, we could connect with the world. For us we function but we are not living.'(S9 Haiti Centre urban)
- 'I'd like it but I don't have it.'(S12 DR North rural)
b) I do not like the internet. You might get the wrong item
- 'I don't like the whole internet thing because you buy one thing and they send you another. I'd rather buy it here or have my brother buy it and ship it to me. But not over the internet.'(S11 DR South rural)
- 'If they pay for it and see it with their own eyes, then I'd accept it, but not over the internet.'(S11 DR South rural)
- 'The Avon products that I sell look big in the pictures and when you get them, they're small. Like a cat in a bag.'(S11 DR South rural)
- 'It's the same. I may receive something I don't want. If I don't like it, will I get my money back.'(S12 DR North rural)
- 'But if you pay this way, is there a guarantee?'(S12 DR North rural)
c) Buying via internet is unsafe
- 'If they do it over there, it's fine. But here they steal my information and leave me with nothing.'(S10 DR StoDom urban)

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## Model 6: Remitter Buys Product Directly from a Vendor in NY/USA and Family Receives it in Haiti/Dominican Republic

In this model, the Remitter purchases a sustainable energy product directly from an energy company based in New York, that in turn delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.


As was the case with Remitters, Recipients were more enthusiastic about his model. Direct purchasing and direct delivery makes this a very appealing model. With direct purchasing in New York, Remitters pay for the product and family members receive it as if it were a gift. Recipients liked the idea of getting the item for 'free,'meaning that they would not need to use their own money to purchase the item. For most of them, the assumption was that the device would be given to them in addition to money they regularly receive anyway. Several Recipients stressed the importance of communicating with Remitters to ensure that the right product is selected. Some said that they would rather receive the money directly and choose a product locally that better suits their needs. Other participants believe that this model could work perfectly because other goods, like food, are also sent to them.

Recipients noted that a major advantage of this model is to have the vendor take care of shipping, customs, product delivery and storage. Recipients, as well as Remitters, thought there should be a distribution center in Haiti or in the Dominican Republic where families could go and pick up the product. Lastly, Dominican Recipients saw several additional advantages to this model: buying the product in the United States makes it cheaper because of taxes in the Dominican Republic; it ensures that the items are authentic and not counterfeits; and it means the product is more likely to have a guarantee provided by the vendor in New York.
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| Model 6: Remitter Buys Product Directly from Vendor in NY/USA and Family Receives it in Haiti/Dominican Republic |  |
| :---: | :---: |
| a) | With direct buy in New York, Remitters pay for the product and I get it for free! |
| - 'The best would be if they pay there and I receive the product here.'(S8 Haiti Centre rural) |  |
| - 'If I buy one directly, it's better. They send it, I receive it and that's it.'(S10 DR StoDom urban) |  |
|  |  |
| - 'It's OK because if he pays for it then I don't have to go to any trouble. That way my money isn't wasted.'(S10 DR StoDom urban) |  |
| - 'I prefer having it sent from there. I expect it as a gift. If it arrives, well. If it doesn't, it doesn't. I'm not waiting for the money. It's safer for them to send it.'(S12 DR North rural) |  |
| b) Remitters and Recipients need to communicate so that we get the right product |  |
| - I'd like to have the product that I want sent |  |
| - 'I support the theory of buying the product, but if I like the lamp, I buy the lamp. If they send it, well, I receive it.'(S10 DR StoDom urban) |  |
| - 'They would buy what you know, what you ask for or what you tell them. That's part of the communication. I'd ask them to send it by |  |
| - 'I prefer the light (Lighting Kit), I'd want that sent to me. If I don't have money, I will find it or ask for it.'(S12 DR North rural) |  |
| c) Receiving the product is similar to food transfers |  |
|  | 'I like the way they do it with food transfers. They pay for the food over there and let us know that they sent the transfer and they tell us where it needs to be picked up or if it will be delivered at home.'(S8 Haiti Centre rural) |
|  | 'I want them to buy it with a supplier like the "Sirena" and I pick it up at the store.'(S10 DR StoDom urban) |
| d) Vendor takes care of ship |  |
| - 'For everything I need. Here in Hinche we don't have big stores.'(S9 Haiti Centre urban) |  |
| - | 'It would be a store in Hinche or if it's in PAP I would go also but it's dangerous to buy in PAP because you can get robbed on the way.'(S9 Haiti Centre urban) |
|  | 'You've shown the best model. Of course it's preferable for it to be delivered to my house. When it arrives, it arrives, and when there's a problem there's only one person or company responsible.'(S10 DR StoDom urban) |
|  | 'They deliver it to your home? Wow! This makes life easier. This is the best because I only have to be home to receive it.'(S10 DR StoDom urban) |
|  | 'It's convenient. They pay for everything and deal with the shipping. I'd like them to buy it for me. That model is good because they buy it there and deliver it to me here.'(S11 DR South rural) |
|  | 'Sometimes customs steals things but I prefer having it sent because there are companies that deliver it.'(S12 DR North rural) |
|  | 'It's not the client's problem; it is customs' problem if there's a package missing. I don't worry because you can complain to the company.'(S12 DR North rural) | company.'(S12 DR North rural)

e) Vendor should have a distribution center in Haiti or in Dominican Republic and family picks up the product

- 'I prefer that they pay for it and for me to pick it up here at a distribution center. They can pay with credit card or cash directly at a store.'(S8 Haiti Centre rural)
- 'I prefer if they pay there and I pick up the product here.'(S10 DR StoDom urban)
f) It is cheaper to buy it in USA because of taxes in Dominican Republic
- 'I think this is better, because with the money I can only pay for two things. Over there, with the same amount of money, they can buy more. It's cheaper over there.'(S12 DR North rural)
- 'If they send me US\$100 I'll buy a DVD, and in NY it can cost US\$20. My father sent me a 27 inch TV and it cost them less than it does here.'(S12 DR North rural)
g) We get original goods, not counterfeits
- 'Are these products here? They pay for it and I pick it up, or is it with a middleman? I don't want it to be a fake.'(S10 DR StoDom urban)
- 'If they send it from there they're not fake products, because when they come from over there they are original. It's safer as far as getting the original product.'(S11 DR South rural)


## h) The product is guaranteed by the vendor in New York

- 'It's easier and much better because that way they pay for it there themselves and it comes with a phone number to send it back if it's damaged.'(S11 DR South rural)
'Without a maintenance guarantee, you call the family. That way if it breaks, you don't loose the money.'(S12 DR North rural)


## Model 7: Remitter or Recipient Buys the Product Directly from a Vendor in Haiti/Dominican Republic

In this model, the Remitter or the Recipient purchases the sustainable energy technology directly from an energy company that operates in Haiti or the Dominican Republic. The vendor delivers the product directly to the family or makes it available for pick up in a warehouse in the receiving country.

The idea of buying directly from a local vendor in Haiti or in Dominican Republic received a very positive reaction from most of the Recipients. These participants said they would prefer to receive the money directly and not depend on Remitters to send the product. Some argued that their relatives living abroad would not actually get the products for them, that Remitters are living under different circumstances and might not understand the real local needs, or that they simply did not want to wait for an eventual gift.


Recipients also said that they would prefer to choose the product themselves because the Remitter might buy something different than the items that local people truly need. Some said they would feel more confident buying the product in a store that is familiar to them. Other participants added that buying the product locally would save shipping, delivery and custom fees, as well as worries about possible robbery or product delays at customs. Lastly, some participants referred to the benefit of having a guarantee with a local vendor, and the comfort of knowing that the product would not be damaged while being transported.
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Model 7: Remitter or Recipient Buy Product Directly from Vendor in Haiti/Dominican Republic
a) I prefer to receive the money and buy the product directly from the vendor here (in Haiti or in Dominican Republic)
- 'I want to receive the money before going to the place that sells these products and I will pay for it there.'(S8 Haiti Centre rural)
- 'I would like to buy it here instead.'(S9 Haiti Centre urban)
- 'I prefer to have the money sent and I buy it here because either way the money is being spent.'(S10 DR StoDom urban)
- 'I prefer to have the money sent to me.'(S10 DR StoDom urban)
- 'If it's from a store here, they give you a guarantee, and if it breaks in two months, they cover it.'(S11 DR South rural)
- 'I prefer buying if it's a product made over there but that I can buy over here.'(S11 DR South rural)
- 'It would be best if they could export it so we could buy it here.'(S11 DR South rural)
- 'Have the money sent and I pay for it here.'(S11 DR South rural)
- 'I'll buy it if they send me the money.'(S11 DR South rural)
- 'I prefer to get the money and buy it here.'(S12 DR North rural)
- 'My family sends me the money to save time and I buy it here. For electrical appliances they send me money and I buy them here.'(S12 DR North rural)
b) I prefer to buy it here and not depend on the Remitters to send the product to me
- 'They won't get us these products because they don't understand our needs. Our families in the US don't have light problems so they don't understand
our suffering.'(S7 Haiti North rural)
- 'I'm not interested in the family buying it there. They are not going to buy it for us.'(S7 Haiti North rural)
- 'Over there people are using good technology. They don't have an incentive to buy it for us. We would do it on our own.'(S8 Haiti Centre rural)
- 'We in Haiti like to live in a different style. We would like to have all of them (products). People in US already have an idea of what I'm doing with the
money.'(S9 Haiti urban)
- 'Our families will help us with necessities not luxuries.'(S9 Haiti Centre urban)
- 'I don't want to put my faith in someone else outside, we never know how much and how often they will send. I will do my own planning.'(S9 Haiti
Centre urban)
- 'You will have a problem if you are waiting for that money to buy a product and you don't get it on time'(S9 Haiti urban)
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c) I want to choose this product

- 'I want to choose what I am getting. If they want to send me something, they can send me a car.'(S7 Haiti North rural)
- 'I would prefer that they send me the money and then I would buy the product that I want or need.'(S8 Haiti Centre rural)
- 'I prefer to get it myself. I prefer to buy it here. I don't trust other people.'(S9 Haiti Centre urban)
- 'I don't like the idea of someone buying it for me. I want to buy my own things.'(S9 Haiti Centre urban)
- 'I would buy it here. We don't want someone else to be responsible for choosing what I'm going to use.'(S9 Haiti Centre urban)
- 'I want the money here so that I can choose what I want.'(S11 DR South rural)
- 'What if the family chooses something that I don't want, that's why I prefer having the money sent and that way I can choose it.'(S11 DR South rural)
- I'd like to have the money sent to me and then I can choose it here and that way I can make sure it's not damaged and that the product is what I
want.'(S11 DR South rural)
d) I want to buy it in a store that I know
- 'If there was a store here it would be easy. I would like to get it with store credit to buy it. I would not take it from my relative from abroad.'(S9 Haiti Centre urban)
- 'I want to buy from I store I know.'(S10 DR StoDom urban)
e) To save shipping and delivery costs
- 'The shipping costs will be high if they are sending it from the US. I would rather get it from a distributor in Haiti.'(S8 Haiti Centre rural)
- 'It would be best for us to receive the money in Haiti and then go to the store to buy the product to avoid paying shipping and customs.'(S8 Haiti Centre rural)
- 'It would be more expensive to buy there (NY) and ship here.'(S8 Haiti Centre rural)
- 'It depends on whether they charge for shipping, because if they do, then it's better for me to buy it here so that my sister can save on shipping.'(S10 DR StoDom urban)
- 'No, because you can use Gomes Express and they take care of customs and they send it to branches in the DR.'(S11 DR South rural)
- 'Because I have experience, when my mother sends me a box every two months, there's sea salt from the boat in the boxes. I like to have the money. They tell me that sending the product isn't worth it because they have to pay US\$200 for the product, plus shipping. Everything's more expensive.'(S12 DR North rural)
- 'Well, it depends on the price here. If it's cheap, they should send the money and I buy it here. Because that way they save money on shipping.'(S12 DR North rural)
f) No worries with custom fees, robbery at customs or delays
- 'My family will have more difficulty paying for it there.'(S7 Haiti North rural)
- 'That would be too expensive because they would have to pay for customs.'(S8 Haiti Centre rural)
- 'The problem is that if they send it, it can take between 15 days and a month.'(S10 DR StoDom urban)
- 'Customs steal it and it also depends on the agency.'(S12 DR North rural)
g) It is easier to validate the guarantee
- 'I prefer to have the money sent and I buy it here because if there's a problem with the product I can't send it back.'(S11 DR South rural)
h) The product does not get damaged
- 'In NY they get a stamp that says "fragile", which means they will take care of it in case it breaks.'(S12 DR North rural)


# Annex 3 : Sustainable Energy Products 

# Financing Sustainable Energy through Remittances Flows in Haiti and the Dominican Republic 

Financed by FOMIN - a Member of the IDB Group
Presented by ARC Finance and BASE
December 2009


## Annex 3: Sustainable Energy Products

1. Lighting kit
2. TV
3. Radio, flashlight and cell phone charger
4. Portable lantern for lighting
5. Solar cooker
6. Solar water purification equipment
7. Solar water heater
8. Stove

## Solar Photovoltaic Technology

## 1. Solar Lighting Kit

- Produces 28 watts with a crystalline solar panel
- Illuminates 6 areas with a high efficiency bulb of 9 watts (equivalent to a 60 watts regular bulb)
- Charge controller
- Roof and wall fixing kit
- No technical skill or special tools needed
- Solar panel with 35 year life expectancy
- Size: $56 \mathrm{~cm} \times 40 \mathrm{~cm} \times 2$ cm

- Weight : 4 kgs
- 10 year warranty
http://www.solarshop.co.uk/solar-mate-IVES.htm


## Solar Photovoltaic Technology

## 2. Solar powered TV

- 26 inch Sharp television that is powered completely by solar energy.
- Batteries are charged in 6 hours and last for 3 hours.
- Panel installed on the roof.

http://www.solarshop.co.uk/solar-mate-IVES.htm


## Solar Photovoltaic Technology

## 3. Solar powered radio, a flashlight and cell phone charger

- Radio, flashlight and cell phone charger (12 cm long and weighs 230 g ).
- Includes a solar panel and a crank so as not to run out of power. No need to buy disposable batteries.
- In sunlight, charges itself and plays continuously. The internal battery is fully charged by the solar panel or an external
http://www.freeplayenergy.com/product/compan charging adapter.
- Gives 12 hours of play time or 16 hours of light.


## Solar Photovoltaic Technology

## 4. Portable solar lantern for lighting

- Light without the need to constantly replace the batteries.
- Includes 12 high technology bulbs (LEDs) and 4 ways to charge it:
- built in solar panel
- hand crank
- cigarette lighter adapter
- optional AC charger
- Leave it out in the sun for hours of use at night. If no sun, wind it up with the hand crank.
http://www.freeplayenergy.com/product/ companion


## Solar Technology

## 5. Solar cooker

- 2 pots with lids; capacity of 3 liters
- Thermometer included
- Easy to transport and store. Weight 10 pounds and is $121 / 4^{\prime \prime}$ high by 27
 $1 /{ }^{1 /}$ long by $17{ }^{\prime \prime}$ deep.
- Can be pointed towards the sun
- Cooking time depends on location and on sun angle

- No burnt food. Cooking temperatures are often 210-260 F. Maximum at 300 F in the equatorial regions
- Wind and moisture resistant

http://www.solarcooker-atcantinawest.com/solar_oven_comparisons.html


## Solar Thermal Technology

## 6. Solar water purification system

- Produces distilled water.
- Straightforward design, no moving parts.
- No tools required for assembly.
- In temperate

climates, produces 0.5
gallons (6 liters) per day and
http://www.solaqua.com/solstils1.html approximately half that in winter months.
- Produces about 1 liter per sun hour.


## Solar Thermal Technology

## 7. Solar water heater

- Serves 3 people.
- Stable and easy installation.
- Scientific structure.
- Inner tank:

Stainless steel

- Outer shell:


Galvanized steel
coated corrosion prevention layer. Both install on inclined and flat roof

- 5 year warranty


## 8. Wood burning cooking stove

- 2 doors for wood, charcoal and paper.
- Uses 40\%-60\% less wood, charcoal or paper.
- Can use briquettes.
- Size: $35 \mathrm{cms} \times 35 \mathrm{cms} x$ 35 cms ( $14 \times 14 \times 14$ inches).
- Weight: 10 kg (22 pounds).


# Annex 4 : Models to Link Remittances to Sustainable Energy Products 

Financing Sustainable Energy through Remittances Flows in Haiti and the Dominican Republic

Financed by FOMIN - a Member of the IDB Group
Presented by ARC Finance and BASE
December 2009

## Basic Scheme: Linking money sent to the purchase of a sustainable energy product

- Remitter in NY:
- Allocates cash to family in Haiti/DR
and
- Purchases a Sustainable Energy product for family in Haiti/DR





## Model 2. Remitter buys sustainable energy product with a LOAN

- Money sent via a Transfer Agency or Bank to family.
- Remitter takes out a loan from a Bank in Haiti/DR and pays it back in small installments.
- Bank pays Vendor for sustainable energy product.
- Vendor in Haiti/DR gives product to family.


## Remitter's Loan

Account in Bank in Haiti/DR

Cash for families in Haiti/DR


Vendor

Remitter's family in Haiti/DR
$\qquad$

- Money sent via a Transfer Agency or Bank to family.
- Recipient takes out a loan from a Bank in Haiti/DR and pays it back in small
installments.
- Bank pays Vendor for sustainable energy product.
- Vendor in Haiti/DR gives product to family.


## Model 2. Recipient buys sustainable energy product with a LOAN ergy product with a LoAN

- Vend
in Haiti/DR

Cash for families in


Vendor


Remitter's family in Haiti/DR


Model 3. Remitter buys sustainable energy product from VENDOR in Haiti/DR via TRANSFER AGENCY

- Money sent via a Transfer Agency to family.
- Transfer Agency makes payment to Vendor in Haiti/DR in one lump sum.
- Vendor in Haiti/DR gives product to family.

Purchase in full from Vendor


Remitter's family in Haiti/DR
 Vendor


Model 5: Remitter buys product directly from VENDOR in Haiti/DR via INTERNET (using credit card or prepaid card)

- Remitter goes on-line to the Vendor's website and buys product directly with credit card or with prepaid card bought in the US.

- Vendor in Haiti/DR gives product to family.


Remitter's family in Haiti/DR


## Model 6. Remitter buys product directly from Vendor in NY/USA

Remitter's family in Haiti/DR

- Buys product from Vendor in NY/USA.
- Vendor in NY/USA delivers product to the family in Haiti/DR.



## Model 7. Remitter or Recipient buy product directly from Vendor in Haiti/DR

## Remitter's family in

 Haiti/DR- Remitter buys product from Vendor in Haiti/DR
- Remitter sends money and Recipient buys product from Vendor in Haiti/DR.
- Vendor delivers product to the family in Haiti/DR.


[^0]:    ${ }^{1}$ CIA- World fact book. https://www.cia.gov/library/publications/the-world-factbook/geos/ha.html
    ${ }_{3}^{2}$ Migration Information Source. http://www.migrationinformation.org/Usfocus/display.cfm?ID=214
    ${ }^{3}$ CIA- World fact book. https://www.cia.gov/library/publications/the-world-factbook/geos/ha.html
    4 Migration Information Source. http://www.migrationinformation.org/Feature/display.cfm?id=259

