



KWISON ELEKTRIK

**Solar Power for Electricity Access and Electric
Cooking in Haiti**

June 2021



SUNSPOT™

Ak Enèji Pwòp
klere Ayiti se
plop plop! | **Enèji
Pwòp**



Study Overview

- 20 “microgrid” households connected to EarthSpark’s solar microgrid
- 8 “off-grid” households connected to solar home systems via [SUNPOT™](#) electric cooking systems
- Electric pressure cookers and induction stoves



Concerns for Electric Cooking

- **Cost** – Making the devices (and then the electricity) comparable to charcoal
- **Ability to cook traditional Haitian food** – Skepticism (particularly of the EPCs) that the devices will be able to cook the foods they want to
- **Pot / Device type and size** – Size of devices and types of pots
- **Difficulty of electric cooking** – Perception that electric cooking will be difficult and not able to replace charcoal



Key Switching Points

- **Cost** – Cost savings/comparison will be the most important decision factor for customers
- **Time-savings** – The time savings benefit was the most often highlighted by participants
- **Convenience** – No smoke or excess heat, easy to use, and the ability to “go and do other things” while cooking



Key Promotion Channels

- Social capital with communities from sustained on the ground engagement
- Outreach through established Energy Committees
- Flyers, brochures, recipe guides, etc. developed as a result of the initial pilot
- Pre-development surveys
- “Kwison Elektrik”
- Word of mouth



RECHO ELEKTRIK A ENDIKSYON

GID PRATIK KOD IZOLASYON
 • ENERJYAN ENERJYAN
 • MWOZ ENERJYAN

Diferan pati recho endiksyon la

KWISON ELEKTRIK

ENERJYAN ENERJYAN
 ENERJYAN ENERJYAN

SIMPOT LA AK DIFERAN PATI PA LI!

Ki sa li ye Simpot la?

Ki akweswa ki vini avèk Simpot la?

Enèji Puwòp

GID ERE YO

Kod	Koz pwoblèm	Solisyon
E0	Aparèy la pa dwe ka kontwòl ou istansil ki pou sou sifas recho a Kontwòl/istansil la pa plan nan mitan gid aliyman recho a	Pou yo ka kontwòl/istansil ki konpatib sou sifas recho a Pou yo ka kontwòl/istansil ki konpatib sou sifas recho a
E1	Tampèratil a bas wo Difonksyonman pandan kwison Pa gen ase vantilasyon recho a	Mete kontwòl/istansil la nan gid aliyman recho a 1. Retire istansil la sou sifas recho a e deplage li. 2. Akize jwenn pou egwa Apres tou ouare recho a. 3. Lese recho a refwazi pou omwen 15minut. Apre sa, replage li.
E2	Tampèratil sifas de kwison dife pou 238°C (460°F)	Si recho a sou mod POWER (pwisans), chanje li pou mod Tampèratil. Si wèp bouyi yo bliid, swite etap yo pou kod E3.
E3	Voilaj twa two wo ou two ba	1. Deplage recho a 2. Pa gen zakasyon Enèji Puwòp verifike ou gen 110/120V nan pri la. 3. Si volaj la pa 110/120V, pa replage li jiska Enèji Puwòp fe chanjman li rezous.
E4	Kan recho a nan mod POWER, recho otomatikman regle pou tampèratil ja ba. (E40)	Sa se pa youn are ou youn difonksyonman. Se youn mizaj zakite man aparyè la pou anpeche manje paw boule oulyen sifas recho a sitchefo.

Note: Pou E2 ak E3, recho a pou etan pou ko li otomatikman apre 1 minit.

An Enèji Puwòp
 nan Enèji Puwòp
 Enèji Puwòp
 EarthSpark

KWISON ELEKTRIK

- Social media group for sharing stories, recipes, news, and profiles for Haitian electric cooking including EarthSpark's documentary footage
- EarthSpark customers as well as other organizations and the Haitian diaspora community
- Kwison Elektrik Community
 - Instagram: @kwison_elektrik
 - Twitter: @KwisonElektrik
 - Facebook: Kwison Elektrik



PARTICIPANT SPOTLIGHT: MANITE

BIO

Manite is a courageous 53 year old woman, born and raised in Les Anglais, in the south of Haiti. She has four grown up kids who live, work or study in other towns. Everyday, she cooks food for herself and 4 other family members: her husband, her mother and her 2 nieces. Manite used to be a food and juice maker and vendor. That was until about 1 year ago when she stopped doing so following a doctor's recommendation: one day, while pushing her wheelbarrow full of juice and food over to her selling spot, she injured herself. Now, she is getting by with small jobs, like the retailing of food products such as plantains, yam and pwa congo (congo beans).

At times, when the opportunity arises, she sells "1 bal, 2 bal tenis, ou 1 bal pepe" (1 or 2 lots of tennis shoes or secondhand clothes). She however wants to restart selling food as it is more profitable. Even if she doesn't get many customers in 1 day, the unsold food can still be eaten by her family. Manite, who was only 10 years old when she learned to cook from her mother and her aunt, still remembers the first meals she made: "diri peyi, pwa nwa, ak pwa congo" (the local rice, black beans and congo beans!)

PROJECT SUMMARY

Charcoal expenditure before project:	About 1,125 HTG/ month
Number of people fed from meals:	5 most often, 13 at most when my kids come to visit.
Greatest benefit from electric cooking:	Cooking is much faster and comfortable and I do not have to buy charcoal.
Impact on finances and/or lifestyle with the project:	I can invest more time taking care of my house, cleaning, washing, etc. I can also relax a bit more.
Noticeable changes in cooking habits:	I cook more frequently now, as the time of the day matters little. Even if it is in the middle of the night, I can easily prepare something to eat.




For more information on EarthSpark and Enjei Pele's work please read: check us out at: <http://www.earthsparkinternational.org>

DIRI KOLE AVEK PWASON SOS WOJ
Serves 8 *by Rosanne*

Rice and beans (Diri ak Pwa):

Ingredients:

- 220ml black beans
- 1 Tbs vegetable oil
- 1 capsicum
- 132L white rice
- 1 Maggi cube
- Water
- "Epi" mixture (made of leek, and garlic)

Step 1: In the Simpot, under Pressure mode, cook the black beans for about 30min.

Step 2: Using a strainer, separate the beans from the cooking water. Set both aside for later use.

Step 3: Under Sauté mode in the Simpot, fry the "epi" in the oil, and add the capsicum.

Step 4: Stir in the beans and then the Maggi.

Step 5: Add the cooking water, and let it boil.

Step 6: In the meantime wash the rice until the washing water is clear.

Step 7: Once the water has boiled in the Simpot, add the rice and stir the contents of the pot. Set the Simpot to 15 minutes under Pressure mode. If you like it when the rice makes a "gratin" (crispy rice that forms at the bottom of the pot), set the time to 20 minutes.



Fish in a red sauce (Pwason avek sos wouj):

Ingredients:

- 6 small fish (pwason woz)
- Sour oranges for cleaning the fish
- 3 cloves of garlic
- 1 leek
- 1 chili
- 3 Tbs of tomato paste
- 1 Tbs of oil
- 2 Maggi cubes

Step 1: Wash, remove scales and clean the fish. Wash with the sour oranges.

Step 2: Using a mortar and pestle, crush the garlic, leek and Maggi cube.

Step 3: Leave the fish to marinate in that mixture for a little.

Step 4: Using the induction cooktop at level 3, fry the tomato paste in the oil.

Step 5: Add some water to prepare some sauce, and increase the induction cooktop level to 4.

Step 6: Add 1 Maggi cube and the fish to the sauce.

Step 7: Simmer for 10 minutes. The fish and sauce is ready.





Video Promotions and Outreach

- First in a series of videos highlighting participant experience and the opportunity of electric cooking
- Shared in English and Creole on the Kwison Elektrik pages
- Will be a key part of stakeholder outreach going forward



Integrating into Microgrid Scale-up

- 23+ microgrids in the next five years with the [Green Climate Fund](#)
- **Planned electric cooking:**
 - >1,500 households
 - Over 1 GWh in annual electricity consumption



Contact



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Additional Information

- [Final MECS Programme Report](#)
- [EarthSpark's "Kwison Elekrik" white paper](#)
- "Kwison Elekrik" documentary to be released on Haitian Flag Day (May 18th)
- Kwison Elekrik Community
 - Instagram: @kwison_elekrik
 - Twitter: @KwisonElekrik
 - Facebook: <https://www.facebook.com/groups/746044959411143/?ref=share>