REPORT ON SOLAR COOKERS TRAINING

Duration: 6 days

Location: Ouanaminthe (Northeast, Notre-Dame Parish Hall)

Period: July 11-16, 2025

Organized by: HAGN (Haiti Adolescent Girls Network) and PPAF (Public-Private Alliance Foundation)

Trainer: INNOCENT Aline

Part One

1. Introduction

As part of the promotion of renewable energy and the fight against deforestation caused by the use of charcoal, a six-day training course was organized on the manufacture and use of solar cookers.

This activity brought together 30 adolescent girls from Port-au-Prince and Gonaïves. The main objective was to teach them technical skills to promote sustainable energy independence. This report describes the training process, the achievements, the challenges encountered, and recommendations for the future.

2. Training Objectives

General Objective:

To train adolescent girls and young women in the manufacture and use of solar stoves.

Specific Objectives:

To raise awareness of the benefits of solar energy.

To impart the technical skills needed to build a functional solar stove.

To encourage the use of solar stoves within households.

To promote environmental protection through the use of clean technologies.

1. Methodology

The training alternated between theoretical presentations, practical demonstrations, and small group workshops to facilitate learning.

The trainers used visual aids as well as the tools and materials needed to manufacture solar stoves (wood, mylar, glue, saw, etc.). Sessions were held from 9:00 a.m. to 1:00 p.m. daily, with a break around 12:15 p.m.

2. Activity Schedule (Daily Summary)

Day 1:

30 participants attended with two mentors, accompanied by mobile staff.

Theoretical presentation on the 10 manufacturing steps using the DARE method.

Presentation of all materials, followed by a question and answer session.

Practical work began: measuring, tracing, and cutting plywood parts.

Lunch break, then end of the day.

NB: 98% of participants were active and highly interactive.

Day 2:

30 participants and 2 mentors present.

Quick review of the previous day's steps. Measure materials and form 7 groups (7 groups of 4 people per group).

Cut, glue, and begin assembly of the box. Paint the Interiors of the solar cookers.

Day 3:

28 participants and 3 mentors present.

Distribution of materials for a second (interior) box per participant.

Assembly and exterior painting, adding insulation material (double thickness), mylar foil sheets, and polystyrene to reinforce the insulation.

Form 7 groups (4 people per group) to paint the exteriors and begin installing the reflective surfaces.

Day 4:

28 participants present.

Continue installation of the insulating elements: mylar foil sheets, cardboard, polystyrene.

Cut and add reflective surfaces to the box lids.

Day 5:

Assembly with 28 participants.

Finalization of the reflectors, installation of the glass, and complete closure of the solar boxes. Display of final products.

5. Results Obtained

28 solar stoves were successfully manufactured. 28 participants were trained.

Acquisition of practical technical skills. Raising awareness of environmental protection.

Participants were highly motivated to replicate and share the technology in their communities.

Names of the participants :

1-	CASIMY	Diafleysi
2-	MILFORT	Rosard Stenia
3-	ANTOINE	Shela
4-	ROSE	Nayflor
5-	JOSEPH	Nerlande
6-	JOACHIN	Jaunisse
7-	JEAM – SIMON	Samecka
8-	MOISE	Daphca
9-	ULUSSE	Wachie
10-	CAMILLE	Loruchama
11-	CAMILLE	Hadassa
12-	ETIENNE	Michelene
13-	PREDELUS	Keycha
14-	NICOLAS	Anne – Massaïca
15-	IZABELLE	Rougy – Dulan
16-	MONDESTIN	Christella

17- CHARLES Shaïna – Ika

18- AUGUSTIN Chedna

19- COMON Lourdine

20- AUGUSTIN Thaïsha

21- BRUNO Carmelitha

22- ALTIDOR Ilionise

23- GARCON Mike – Louleene

24- SAINT – VAL Kettia

25- GEDEON Adenise

26- DORELUS Micleyane

27- NELOR Lovelie

28- JANVIER Lovekencia

6. Evaluation

Evaluation was conducted through:

Continuous observation during the practical workshops.

Oral exchanges to test understanding.

The majority of participants expressed satisfaction and a desire to benefit from other similar training sessions, as well as technical support for their future projects.

7. Conclusion

This training allowed participants to discover a clean, economical, and environmentally friendly technology. In addition to the skills acquired, it also opens up opportunities for local economic development through the manufacture and sale of solar cookers.

It is important to strengthen these efforts to contribute to the fight against deforestation and the promotion of energy independence, particularly in rural areas.

Part Two - Questions and Answers

1. What were the agreements between HAGN and PPAF?

The leaders of HAGN and PPAF were delighted to establish this collaboration. HAGN aims to encourage and preserve the capabilities of adolescent girls. PPAF promotes the improvement

of family life and combats deforestation through clean cooking innovations, including solar cooking.

2. How much did it cost for HAGN and PPAF?

HAGN purchased the materials needed to build the solar cookers, including plywood, insulation, paint and brushes, nails, plastic cups, hinges, a hammer, a tape measure, etc.

HAGN covered the costs of my meals, transportation, lodging, and consulting fees. PPAF covered these same costs for the assistant.

3. What is DARE?

DARE (Direct, Absorbed, Retained, Eaten) is the cooking method we use. It is taken from the Solar Education Project book (The Amazing Sun), written by Mary Buchenic and Jennifer Gasser.

4. What reflective material is used in solar cookers?

PPAF has Mylar sheets from Mr. Roger Haines of Haines Solar Cookers, LLC. To learn more and to obtain some, please contact me.

5. Tell us about the electric saw!

Mr. Tom Hallquist of Solar Oven Reflectors, Inc., has provided a battery-powered electric saw and other materials for PPAF's work. At our Hinche location we recharge the saw using solar panels he also donated.

6. What are the names of the mentors?

The two primary mentors were Youse and Madala.

7. What happened to the two participants who dropped out of the training?

They became ill and were unable to continue. They informed the mentor who had referred them to the training, and their participation was interrupted on the fourth day.

8. What challenges were encountered during the training?

There were some difficulties, including materials that were not compatible with the job, and the store where we purchased the building materials refused to exchange them. This resulted in unforeseen expenses. We handled the situation flexibly, which did not hinder the progress of the work.

9. What work did the paid assistant perform, and how did it go?

The assistant helped me prepare the materials, assisted the beneficiaries during the practical activities, as shown in the photos, and played a vital role in cleaning, supervising, and ensuring

the safety of the equipment each day. He demonstrated commitment and efficiency throughout the training week.

10. What happened concerning the materials for the second solar cooker box, which were introduced on the third day?

These materials were distributed to each group after they completed the first cookers. They began assembling the second cooker, which is a box placed inside the larger box. There was insulation between the two boxes.

11. Were any tests conducted with the new solar cookers at the end of the week? What were the results?

A water boiling test was conducted on two cookers. Lacking a proper pot to cook a simple food like eggs, it took 45 minutes to boil the water.

12. Could the solar cookers also be sold? What can be done concerning a commercial aspect?

The participants are interested in manufacturing more cookers to sell. HAGN mentioned the possibility of supporting them after this training through sessions on entrepreneurship and sales.

13. What prospects do you see for other collaborations with HAGN in the future?

HAGN has expressed openness to expanding this activity, either in other communities where they operate or by involving other groups of young girls and adolescents in similar training. There is a hope to replicate this experience with more participants in order to increase economic and environmental impact.

Annex A – Budget for Aline and her assistant.

1. Transport (aller-retour)

Hinche -> Cap-Haïtien : 500 HT per person × 2 = 1000 HT (aller) + 1000 HT (retour) = 2000 HT

Cap-Haïtien -> Ouanaminthe : 150 HT × 2 = 300 HT × 2 (aller-retour) = 600 HT

Transport total : 2600 HT

2. Food (6 jours)

Breakfast : 150 HT × 2 = 300 HT × 6 days = 1800 HT

Lunch : 250 HT × 2 = 500 HT × 6 days = 3000 HT

Dinner : 200 HT × 2 = 400 HT × 7 days = 2800 HT

Total food (6 days + 1 evening) : 7600 HT

3. Lodging (7 nights)

500 HT / night × 7 = 3500 HT × 2 persons = 7000 HT

Total général (transport + nourriture + logement) :

2600 HT + 7600 HT + 7000 HT = 17,200 HT

Consulting fees (Aline and her assistant) : 60,000 HT

NB: HAGN agreed to cover Aline's costs and consulting fees. PPAF covered her assistant's costs. Aline divided the total food, transportation, accommodation, and consulting fees in half to find the cost of her assistant. (= 73,000 gourdes, or US$ 560)

Annex B – Selected Photos