



## SNAPSHOT

### Renewable Energy Saves Time, Money

**With biogas produced from an on-site biodigester, one family transforms their daily life.**



*Photo by Fintrac Inc.*

Kelin Madrid Ramos prepares the family meals on an eco-stove that uses biogas from their newly-constructed biodigester. This renewable gas helps save the family time and money.

**“For me the stove is perfect. Thank you USAID-ACCESO; we’re doing great!”**

*Kelin Madrid Ramos*

**Telling Our Story**  
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As part of its natural resource management component, USAID-ACCESO is working with rural households to introduce environmentally-friendly, low-cost, and efficient gas stoves. These stoves help improve the quality of life in rural areas and promote effective use of resources.

Jose Rene Madrid Torres learned of the concept from USAID-ACCESO technicians who visited his small community of Agua Buena, Copan. He brought the idea to his family, who was at first skeptical of the idea of using manure to fuel a stove.

“I did not believe,” said his wife, Ernestina Ramos. But after some discussion, the family decided to follow USAID-ACCESO’s advice.

Biodigesters function by breaking down organic material in the absence of oxygen, generating biogas and an organic fertilizer. Biogas is composed of methane and carbon dioxide, and can be used as fuel in communities without reliable access to electricity.

The biodigester the Madrid family built is capable of producing one cubic meter of gas daily, which can power their stove for six hours, enough time to prepare at least three meals. The family is also using the gas to light their lamps, allowing them to have light throughout the day and night without affecting the stove’s functionality.

Women are the main beneficiaries of the more efficient household stove. Ernestina’s daughters, Glenda and Kelin, are seeing the advantages of the biodigester as well.

Glenda is in charge of “feeding” the biodigester every morning so it will produce gas for the household. Kelin prepares breakfast for the family – a task that used to require her to wake at 4 a.m. to light the wood for the stove. With the eco-stove, Kelin does not need to begin preparing breakfast until 6 a.m.

Besides saving time, biodigesters and biogas help reduce overall firewood use and instances of respiratory diseases, and contribute to increased production of organic fertilizer for home gardens.

Neighbors have been visiting the Madrid family to see the biodigester in action. Ernestina said everyone was impressed with the output and uses, and expressed interest in replicating this technology in their own homes.

USAID-ACCESO is currently working with 12 families in four departments to install and use biodigesters as energy sources for their homes and farms.