

Final Report for District Grant P-352, Solar Cookers for Gulu, Uganda

San Diego Downtown Noon Rotary Club 33

Rotary Club of Gulu, Uganda

The goal of this project was to provide materials for 500 families to make durable solar cookers in Gulu, Uganda. The project built on last year's District Grant P-153, which provided 292 "reflective bubble insulation" solar cookers that were distributed by the Nairobi Mashariki Rotary Club. Three months after distribution, five out of six recipients were using their solar cooker at least weekly, and three of six recipients (50%) used their cooker every day. A third of recipients cooked two meals a day. On average, they saved \$9 USD a month on fuel costs, and reduced their use of firewood by 77 percent. Almost everyone had a friend or relative who wanted to buy a cooker or to receive training in solar cooking. Thus, project P-153 showed that there is a market for solar cookers in East Africa.

Despite the success of project P-153, each solar cooker cost us almost \$30. To reduce that cost for the new project, P-352, we persuaded a Nairobi company, Global Hardware, Ltd. (which has strong connections to Rotary), to purchase materials in bulk, and create a "supply chain" of inexpensive materials, and to sell enough materials for 500 cookers to us. In this way, our Gulu project will provide "leverage" to insure that there is a supply of inexpensive materials in Nairobi, to enable entrepreneurs to buy materials and make solar cookers for sale, and to allow Rotarians and other NGOs to purchase additional low-cost cookers for charitable projects.

As planned, we bought materials for 500 cookers from Global Hardware, Ltd. for \$12 per cooker. Instead of the bubble material used in last year's cooker, the new cooker uses more durable MPET reflective IXPE foam insulation, and adds a clear polycarbonate windscreen that creates "oven-like" conditions around the cooking pot.

This \$6,000 purchase achieves our twin goals of "provid[ing] materials for 500 families to make durable solar cookers in Gulu Uganda," and creating a supply chain for inexpensive solar cooking materials in Nairobi. We have raised sufficient additional money from Club 33 to pay all expenses necessary to transport the cookers to Gulu, and to enable the 500 families to make the cookers and receive training in solar cooking. In addition, we have sufficient money to obtain a

thorough evaluation of the cookers a few months after distribution, as we did with district grant P-153.

So this is our final report for P-352, but we believe this is just the beginning of a revolution in solar cooking in East Africa.