

SOLAR COOKERS INTERNATIONAL (SCI)

**INITIATIVE TO PROVIDE
SOLAR COOKERS FOR CHAD AND DARFUR**

FREQUENTLY ASKED QUESTIONS

Since 1987, Solar Cookers International (SCI) has spread solar cooking and solar water pasteurizing to benefit people and environments, assisting over 30,000 families in Africa. By providing simple tools for daily meals and safe water, we are reducing energy poverty to brighten the future. Solar Cookers International has partnered with KoZon Foundation to provide solar cookers for Darfur refugees at Iridimi camp, in eastern Chad. SCI is a nonprofit organization based in California.

KoZon Foundation is a Netherlands-based charitable organization providing women in the Sahel region of Africa with inexpensive solar cookers. The name KoZon is an acronym for the Dutch words for cooking with solar energy. Over the last ten years, this volunteer operated organization has promoted simple solar cookers in Mali, Burkina Faso, and Niger. KoZon first introduced solar cooking to Darfur refugees in Chad in early 2005.

Jewish World Watch (JWW) contacted SCI in April 2006 wishing to support efforts to reduce the vulnerability of Darfur women as they sought cooking fuel. They previously mobilized synagogues, churches, and members of the general public to provide financial support to build clinics and wells for those displaced by the conflict in Darfur. JWW has staff resources it can devote to public awareness and fundraising campaigns. Therefore, on March 15 2007, JWW assumed administration of U.S. donations for solar cookers for Darfur refugees in Chad. Solar Cookers International and KoZon Foundation are in full agreement with this change.

BASICS OF THIS INITIATIVE

Why are solar cookers needed?

One-third of humanity, mainly in rural areas, depends on wood for cooking fuel. Of those, about half suffer shortages, and some experience severe wood famine, creating new burdens and health risks. Deforestation and increased private land ownership reduce and disperse free wood sources. Cutting of live trees for fuel contributes to soil erosion and depletion of water resources. Burning of wood and charcoal contributes to climate change. In dire situations, dung and crop residues are used as cooking fuel, robbing the soil of regenerative nutrients and further increasing air pollution. In many places, rural women and girls, including pregnant and elderly women and mothers of small children, walk ever-longer distances to gather and carry heavy loads of wood. Elsewhere, wood has become a commodity, and prices continue to rise as traders must travel farther to obtain it. Scarce fuel means unsafe drinking water is not heated to control water-borne diseases and slow-cooking nutritious foods, such as beans, are dropped from family diets. Current shortages of firewood and charcoal, and related risks to health and education, render populations less able to address issues of hunger, poverty and environmental sustainability.

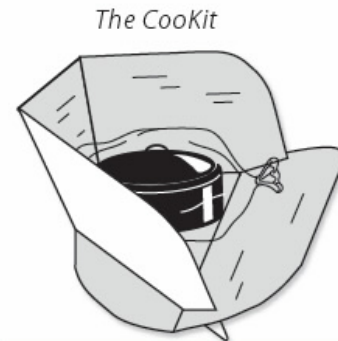
What type of solar cooker is used by Darfur refugees in Chad?

The CookKit, an SCI innovation, is a simple, cost-effective solar cooker for refugee situations and elsewhere. CookKits are elegantly simple, often made from cardboard and aluminum foil or similar reflective material. They require a dark, covered pot and one high-temperature plastic cooking bag per month. With a few hours of sunshine, the CookKit cooks tasty meals for five-six people at gentle temperatures like a slow cooker – ideal for cooking food and preserving nutrients without burning or drying out. Larger families use two or more cookers. The CookKit weighs less than a kilogram and folds to the size of a big book for easy transport. CookKit durability depends

on many factors, including: construction material, use and storage habits, and climate. Although most box-type and concentrator-type solar cookers are generally more durable than the CookIt, they must be adjusted more frequently to face the sun and harder to mass produce in Africa. Without subsidies, household box- and concentrator-type cookers would cost significantly more than CookIts. Large capacity institutional solar cookers are useful in relief projects as they can save tremendous amounts of cooking energy in group feeding situations such as shelters, orphanages, clinics, and schools.

Do the Darfur refugees pay for the CookIts they receive?

No. CookIts and related supplies are provided free of cost to Darfur refugees. Far too many refugees lose everything when they are uprooted from their homes and sources of livelihood. Consequently, relief agencies, the United Nations High Commissioner for Refugees and the World Food Programme provide food, materials for building shelters, education, health care, and other services free of charge. KoZon adopted the same practice.



Where are CookIts made?

CookIts are made in over 25 countries. CookIts for Iridimi camp in Chad are hand-assembled on-site, providing an income generating activity for refugee women. At the Iridimi workshop, these women can produce more than 6000 CookIts a year. Completed CookIts are inspected and receive a quality control stamp. Factory-made CookIts are available from Kenya but shipping to Chad is quite expensive.

Which CookIt materials are imported?

While quality cardboard is available in West Africa, it costs more than imported cardboard from Europe. Aluminum foil and high-temperature plastic bags must be imported as those are not available in the region. Gum arabic from indigenous acacia trees is used to glue the aluminum foil to the cardboard. Pots and lids for solar cooking, purchased from a local supplier, are painted black with chalkboard paint and given to new solar cooks.

Why is there a special need for solar cookers by refugees?

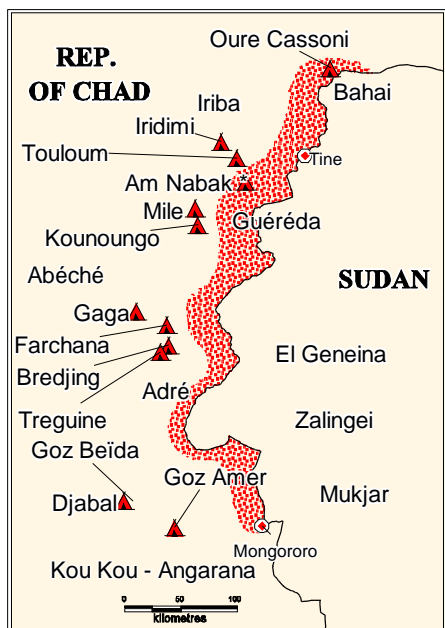
Refugee camps are often located far from major cities and towns, sometimes in areas with little vegetation and harsh climates. SCI assisted refugees at remote camps in arid locations in Kenya and Ethiopia. In Kenya, at Kakuma refugee camp, refugees were not allowed to collect firewood for daily cooking outside camp boundaries and firewood rations were insufficient. Therefore, Kakuma refugees traded part of their food rations for firewood and charcoal brought in by the local population. In Ethiopia, although refugees at Aisha camp were allowed to freely collect firewood, sources of wood were 20-30 kilometers away and collection necessitated overnight stays in the open for women and girls.

Climatic conditions vary among the dozen refugee camps in Chad. Many of these camps, like those in Kenya and Ethiopia, have abundant sun most of the year. Aid agencies are supplying some firewood or kerosene for daily cooking, though not always enough to meet the need. Other agencies encourage the use of fuel-efficient stoves which are helpful but still rely on scarce firewood. Because they use sunlight as fuel, solar cookers help reduce dependence on firewood. Solar cookers complement other cooking methods needed at night, during dust storms, and on cloudy days. Used regularly, a CookIt can save one ton of firewood per year. When the CookIt is combined with fuel-efficient stoves and retained heat cookers - as proposed for Iridimi and two other Chad camps - firewood is needed primarily in the early morning or in the event of clouds, dust storms or high winds.

How does the unstable security situation impact operations?

The security situation in Darfur and in eastern Chad is precarious. The Chad camps continue to operate despite some incursions by Sudanese militias. Humanitarian agencies evacuated non-essential relief workers in April 2006 and again in November of the same year, leaving only essential staff and preventing completion of two monitoring visits. Solar cooking activities continue at a reduced pace at Iridimi camp under the supervision of essential and

Chadian staff. Transportation of goods within Chad is frequently delayed as it requires freight trucks to travel in convoy with armed guards. Communications are difficult and infrequent, limiting available information on the situation at Iridimi and other camps. Consideration is being given to relocating several camps further from the Chad-Sudan border due to security concerns.



WHO IS SERVED AND HOW

Which Chad refugee camps now have access to solar cookers?

A pilot project is underway at Iridimi camp. This camp, near the town of Iriba, hosts approximately 17000 refugees, mostly women and children. Camp population fluctuates as there is migration in and out of the camp depending on security, camp conditions, presence of relatives, and ethnicity. At the request of the United Nations High Commissioner for Refugees (UNHCR), Touloum camp and (current or future new site of) Am Nabak camp will be the next targets for solar cooker dissemination.

Why don't you work in Darfur, Sudan?

At the request of non-governmental organizations working in Darfur, Sudan, SCI is exploring opportunities for involvement of our eastern Africa regional office to provide training and facilitate access to Kenyan solar cooker suppliers for these organizations. SCI seeks to partner with organizations serving internally displaced persons in Darfur, Sudan. Partners would facilitate communication with camp leaders, incorporate training and monitoring into their existing programs, arrange transport of solar cooking supplies, and assure the security of staff, beneficiaries and supplies.

Why do refugee families get more than one CookKit?

With two CookKits, a complete meal can be prepared simultaneously. One CookKit is used to make the starchy staple – sorghum, millet, or maize meal – and the other is used to make the accompanying sauce using split peas, lentils or vegetables. Larger families (six or more people) require a third or fourth CookKit in order to cook a sufficient amount for everyone. When no food is available, CookKits are used to heat water for tea.

Apart from CookKits, what supplies are included?

The initiative provides thermo-resistant plastic cooking bags, similar to oven bags used in North America, to insulate the cooking pot and maintain cooking temperatures. Dedicated cooking pots with lids are also provided, since soot from pots used on fire negatively affects the transparency of cooking bags. Starting in mid-2006, basket weaving materials, cloth and cotton batting were purchased and basket weavers sought in order to supply retained-heat cookers (insulated baskets) that not only keep solar-cooked foods warm for several hours, but can also be used to finish the cooking process after pots have been removed from a cooking fire or solar cooker. Relief agencies in several camps, including Iridimi, have initiatives which provide or help refugees make fuel-efficient stoves.

Water pasteurization indicators (WAPIs) are not provided since relief agencies usually supply safe drinking water to refugees. WAPIs are nonetheless invaluable wherever diarrheal diseases cause illness and death of children. The materials to assemble WAPIs are light, compact, and reusable, though they must currently be imported from the United States.

What training do the refugees receive?

At Iridimi camp, refugees are taught how to use and care for CookKits. Each trainee participates in preparing and cooking local foods, and learns how to confidently handle cooking bags and pots. The training process can take up to five days since most Darfur refugee women have limited literacy skills, aren't used to being in a learning setting,

and may have experienced severe trauma. Camp-wide events such as ration distribution and dust storms can also disrupt training activities.

Is any maintenance or repair required?

CookKits can wear out at the folds, but can be mended with adhesive tape for extended use. Pots and lids require occasional repainting, usually after many washings. At Iridimi camp, refugee families are given a cloth bag in which to store their CookKits when not in use.

How long do CookKits assembled at Iridimi camp last?

CookKits assembled at Iridimi camp can be used for six to nine months. Minor modifications have been made to the original CookKit design to increase wind-resistance and prevent the edges from peeling. These adaptations help CookKits last longer in the harsh climate.

DONATIONS AND FUNDING

I would like to show my support by donating. What amount should I give?

Donations in any amount are welcome. A \$30 donation can equip one family or tent. The number of people to be fed per family or tent varies so donations for larger amounts assure that both small and large families can solar cook daily meals and become more self-reliant.

What does my donation provide?

The most recent cost figures per unit for a CookKit and a pot are \$10 plus an additional \$10 for training and maintenance services. Shipping costs for CookKit materials vary depending on fuel costs. With each family receiving a minimum of two, and sometimes up to four CookKits, \$20-40 is for CookKits and pots without training and maintenance. The balance of funds goes to expenses such as related supplies, monitoring and evaluation, and administration.

How much funding is needed?

There is no upper limit to the foreseeable funds required. Our first step is to ensure that willing solar cooks in Iridimi camp receive assistance and can continue to solar cook. KoZon is expanding the geographic scope of activities, starting with two more Chad camps, to serve 50,000 people. Start-up costs for new sites are approximately \$275,000 for the first year, depending on location, staffing needs, and number of people to be served. Once each family can cook, around \$100,000 is needed for on-going assembly, distribution, maintenance, and replacement supplies.

Who funds this initiative?

Many groups and organizations are involved in the fundraising efforts. KoZon received start-up funds from the Refugee Foundation Netherlands. In August 2005, the Darfur Assistance Group of Visalia, California asked SCI if it would accept funds to provide Darfur refugees with solar cookers. SCI accepted the funds on KoZon's behalf to allow United States donors to receive tax deductions. Over time, as awareness on Darfur and on solar cookers grew, many individuals, groups and organizations started their own fundraising efforts. Synagogues and inter-faith coalitions are very active in fundraising. As of March 15, 2007, institutions and groups should direct their donations to Jewish World Watch, the United States fundraising arm for the Chad projects.

Will my donation be acknowledged?

Those who donate to JWW will receive an acknowledgement. Several groups, institutions and organizations receive donations and pool the funds frequently manage their own thank you letters. We recommend donors verify the tax-exempt status of the organization to which they will give.

Where do I send my donation?

Please send your designated donations for dissemination of solar cookers to Darfur refugees in Chad to:

Jewish World Watch
Solar Cookers Project
16944 Ventura Boulevard, #1
Encino, CA 91316

Telephone: (818) 501-1836
Fax: (818) 501-1835
E-mail: info@jewishworldwatch.org

How can I get involved?

- ♦ Become a member of SCI and receive three issues of the *Solar Cooker Review* each year.
- ♦ Donate to Jewish World Watch.
- ♦ Spread the word about solar cookers and SCI! Tell a friend or do a presentation at your place of worship, club, and community group.
- ♦ Learn to solar cook and experience the benefits of solar cooking first-hand.

WHAT HAS BEEN DONE

What are the accomplishments to date?

- ♦ A Chadian woman, first trained in 2004, is now the head trainer and coordinator for the solar cooker project at Iridimi camp. A specialist was hired to coordinate follow-up after CookKits are distributed and a project assistant was hired to help the head trainer.
- ♦ Initial solar cooking demonstrations were held in early 2005 using 50 CookKits from Europe.
- ♦ Refugee women responded enthusiastically and more demonstrations were carried out.
- ♦ With seed funding from the Refugee Foundation Netherlands, materials for CookKits were purchased and 21 refugee women were trained in CookKit assembly.
- ♦ A workshop for CookKit assembly was completed in early 2006.
- ♦ The most active solar cooks were offered further training. Eighty women have been trained as part-time assistant trainers.
- ♦ There are new income generating opportunities for women (training, assembly, sewing, and weaving), providing women with much needed income for necessities not provided by relief agencies.
- ♦ More than 2500 Darfur refugee women now cook with the sun.
- ♦ Over five thousand CookKits have been distributed, 6000 more are needed for Iridimi camp alone.



Are any other organizations involved? If so, what are their roles?

Refugee camps, such as those in eastern Chad, are overseen by the United Nations High Commissioner for Refugees (UNHCR). UNHCR has provided in-kind support for transportation and communication, and has facilitated the customs process for goods destined for Darfur refugees in Chad.

International charities have contracts with UNHCR to oversee the daily operations of the refugee camps. In the case of Iridimi camp, CARE is the designated camp administrator and Chadian project staff work closely with CARE. The remaining expenses are covered by KoZon with support from individuals, groups, and organizations such as Jewish World Watch, Solar Cookers International and the Refugee Foundation Netherlands.

Are there plans to evaluate the impact of this initiative?

KoZon monitors solar cooking activities on an on-going basis and provides frequent updates to SCI and JWW. An evaluation of the pilot project at Iridimi camp is scheduled for mid-2007, security permitting. Representatives from JWW and SCI plan to travel to Chad to participate in the evaluation. Within two years, KoZon will carry-out an evaluation of solar cooking activities at refugee and internally displaced camps for people affected by the conflict in Darfur. The results of the evaluation will be accessible online on the SCI homepage.

What are the risks?

There are many security risks involved for staff, refugees, and to CookIt making supplies. Project partners are carefully monitoring the situation and place high importance on the safety and well-being of project staff. Should it become too dangerous to continue with solar cooking activities at Iridimi and other camps, stakeholders will be consulted as appropriate and recommendations made on the best use of funds. Similarly, plans will be revised if there is a significant change in the population of the camps served (either an increase or a decrease). JWW will make every effort to keep donors informed of significant changes.

For more information on SCI, or to purchase solar cooking supplies or show your support for SCI, please visit our website at <http://solarcookers.org> or contact us at:

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E: info@solarcookers.org**

For general information on solar cooking, please visit our sister site: <http://solarcooking.org>

Further information on Jewish World Watch is available at: <http://jewishworldwatch.org>

For information on the crisis in Darfur and its repercussions for Chad visit the following:

<http://savedarfur.org>
<http://alertnet.org>
<http://irinnews.org>
<http://unhcr.org>
<http://reliefweb.int>

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