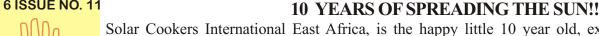
SOLAR COOKERS INTERNATIONAL(E.A)

SUNEWS



JANUARY - JUNE 2008

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Solar Cookers International East Africa, is the happy little 10 year old, excited to share with you our successes, our challenges and even our future plans in this issue of SuNews, January - June 2008! Welcome and let us reminisce even as we learn and move forwards together in the path of the sun.



IN THIS ISSUE:

- 10 Years Work
- Staff Views
- Solar Thermal Use
- Recipes
- And Many More...



UP-COMING EVENTS:

- African Women Water Conference, Nairobi 1 - 5 July 2008
- SCI Water Testing Workshop, Kisumu, 23 - 26 June 2008
- Energy Globe Awards, Brussels, Belgium.
- 25 26 May 2008 Sunny Solutions
- Evaluation, Nyakach June -July 2008
- 3rd Conference on Appropriate Technology, 12 - 15 Nov 2008, Kigali Rwanda

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COOKERS INTERNATIONAL S

Solar Cookers International - East Africa office marked 10 years on 2nd March 2008. The past decade has witnessed positive growth in terms of spreading awareness about solar cookers and teaching the skill of solar cooking amongst Kenyans within the East African region and Internationally.

Beginning in 1998 as one officer one desk office, with a task of co-ordinating solar cooking projects in two refugee camps, Kakuma and Aisha, it has since steered these projects to successful completion and begun three new ones, mainly with settled non-refugee communities in Kenya.

The regional office is proud to highlight the following accomplishments:

PROJECTS:

- Successful initiation and implementation of Sunny Solutions project (Nyakach). This project has seen the creation of awareness in Nyakach and its environs. Over 100,000 people are aware of solar cooking while a total of 4,000 have bought the equipment and are enjoying the benefits of solar cooking. This project is due for an impact evaluation anytime in June 2008.
- The initiation of two smaller projects Kadibo and Kajiado with initial part funding from Global Village Energy Partnerships GVEP. These two are on going and have so far trained 20 SCOREPs, sold 270 CooKits and conducted over 500 awareness demonstrations.

Public Education, knowledge and skills development: SCI (EARO):

- Has been participating in numerous events self initiated or participating in other agencies events, undertaking demonstrations, to the general public as well as to specific groups. SCI (EARO) uses events like agricultural trade fairs, farmer's field days, school talks and demonstrations and also accepts specific invitations from groups to conduct demonstrations.
- Uses mass media, TV, Newspapers and radio to reach a wider audience in awareness creation, as well as in sustaining interest.
- Publishes SuNews, a news brief twice a year to inform the public and all its supporters of what is going on in the projects and in the region. SuNews also highlights the views of beneficiaries, this is the 11th issue.
- The 18 minute SUNCOOKERS DVD, was shot on location and features the work of SCI EARO.
- Staff and volunteers have participated in numerous forums, where they have featured as key speakers in international, regional and local conferences, workshops and seminars.
- Has been organizing and executing training of trainer events, in the country, as well as in Uganda, Rwanda, Somalia, Zimbabwe and Ethiopia.
- Has been producing and translating flyers in local languages as well as booklets on how to use a solar CooKit and a fireless cooker.
- SCI (EARO) has sought to influence policy by attracting the attention of the government and participating in various forums organized by like minded agencies in this effort. The

ministry of Agriculture, Home Economics department is a star in this effort.

SCI (EARO) successfully hosted the Africa Asia Regional Solar Cooker Conference in February 2005. Thus connecting local stakeholders with those in Africa and Asia.

TECHNOLOGY DEVELOPMENT:

- Responding to the challenge of durability of the solar CooKit, SCI (EARO) came up with the OYWA CooKit. This CooKit can last more than two years and has a cloth binding all round the edge and wax at the back to protect it from dump conditions. The OYWA received the Pan African Innovators and Inventors (PAWII) Award in 2005, in Accra, Ghana.
- In 2007, SCI (EARO) managed to Patent the OYWA CooKit with Kenya Industrial Property Institute (KIPI)
- SCI (EARO) succeeded in demystifying the assembly of the CooKit components from the factory to the grassroots women, they now make and repair the CooKits and earn an income from this activity. This strategic move also made the CooKit more affordable.
- In furtherance of the commercialization objective, SCI (EARO) registered the Solar Cookers Enterprises as a profit making arm of the NGO, to enable smooth operations within the legal requirements of the country.
- SCI (EARO) identified a source of parabolic cookers in Jinja, Uganda and are now the main suppliers for the product here in Kenya.

CELEBRATING 10 YEARS OF SOLAR COOKING

PARTNERS:

SCI (EARO) has been keen to work with partners, the most important partner has been the women in the village whom we fondly refer to as; Solar Cookers Representatives (SCOREPs). In the on going projects, 42 village women have been trained, and their skills are enhanced to enable them cook with , make, repair, teach about sell solar cookers.

- We are also proud to state that we have had long term partners as well as short term partners. Long term, like community development associations e.g. NYACODA in Nyakach, African Inland Church Dispensary in Kajiado, as well as short term partners like the Italian Embassy, ITDG, World Vision, Lift Up Africa and many individual donors both within the country and from outside the country.
- The partners list would not be complete without mentioning the devoted members of Solar Cookers International, the Board of SCI over the years, donors, advocates friends, the staff at the head office in the US, and EARO staff and volunteers.
- SCI (EARO) is a member of SCIA, PCIA, HEDON, GVEP, EAETDN (East Africa Energy Technology Development Network). Flying Doctors (EA), NGO Council (K), BID Network, East Africa Environment Network (EAEN).
- We are recipients of several prestigious Awards, such as the Ashden Renewable Energy Awards, the PAWII Award in Ghana, and other numerous certificates by NGOs, government departments for participation often stealing the show!

We continue to build on the list of generous friends, who give spot funding for particular activities such as Klaara and the Belgian school children, Shirkku Holta, David Marrell from New York and Lua Linda of Lift Up Africa.

STATUS:



- From a borrowed space and a file, SCI (EARO) has grown to 4 offices, one in Nairobi, Katito, Rabuor and Kajiado.
- We have moved from a one technology organization to an integrated approach and are actively disseminating other energy technologies such as fireless cookers and various other solar cooker types.
- SCI (EARO) is visible nationally, regionally and internationally. It is registered as an International non governmental organization in Kenya.
- The Regional Office has 5 permanent staff, 7 contractual staff and many SCOREPs and volunteers.
- We have adequate modern equipments to facilitate our work and meet our mandate.

FUTURE PLANS

- To continue with the remaining projects and implement them to conclusion even as we seek other ways of disseminating solar cookers e.g. through existing markets.
- To establish a resource center to serve the whole of western region of the country, while also expanding on the range of products and services

- offered
- To continue seeking other funding opportunities while increasing sales to raise funds.
- To build strong partnership within the region for networking and the fulfilment of SCI mission.

CHALLENGES

- Changing people's attitudes as old habits are hard to change and as long as there is one piece of wood left, people would rather use it before looking on with despair at their "fate"
- Solar cookers complement other cooking technologies and cannot stand alone, in this day and age, people are seeking all round solutions e.g. a mobile phone able to send and take pictures, email etc not just one used as a phone only. Though solar cookers have their place in every kitchen in sun rich regions of the world, their adoption is slow.
- Climate change and the unpredictability of weather patterns
- The CooKit is the world's most affordable solar cooker, however, its durability is in question, though it lasts just like any other cooking technology e.g. metal jiko 2-3 years.
- The large numbers that characterize African families make the CooKit a less attractive choice, but there exists larger solar cookers.
- Due to limited staff and resources, SCI (EARO) is unable to meet the demand in the country on requests for training demonstrations and even within the region.

• Influencing decision makers to include solar cooking as they discuss cooking energy needs of

the country.



WALKING THE TALK, By FAUSTINE ODABA,



Faustine explains how the CooKit works to the Vice President Hon. Kalonzo Musyoka

19 years ago I became a convert to solar cooking, having learnt of it from an American Peace Corp. I have never looked back and my whole family has grown up with solar cooking knowledge and skill.

My passion for solar cooking saw me join the new Coordinator of Solar Cookers International in 1999 to establish the regional office and coordinate refugee projects. We have moved together, from a borrowed office space to our own office and have continued and expanded solar cooking knowledge and skills. We also teach beneficiaries how to make solar cookers and fireless cookers. These efforts have linked me to many people and communities. I have had the opportunity to train in Kenya, Ethiopia, Uganda, Zimbabwe, Somalia, Tanzania and Rwanda.

What amazes me is how people react on seeing hot cooked food from a simple solar cooker! Wow, and as the

women break into song and dance with their hands sticking out for a taste, it is a great feeling to be part of a near miracle! To be at the center of it all, the mighty and the low are all amazed at the reality of solar cooking. More recently I had the chance of a one to one contact with the current Vice President Mr. Kalonzo Musyoka and even gave him a solar CooKit. Early in 2007, while in a show, I gave the Minister for Energy a few tips on how to cook with the Sun!

I am happy to be associated with solar cooking and wish that all who have heard and are familiar with solar cookers may have similar passion as mine. I am convinced that we have a duty to save more trees so that we can breathe better air and have more time to do other gainful things rather than tend smoky fires.

CONGRATULATIONS TO SCI REGIONAL OFFICE FOR 10 YEARS' WORK WELL DONE!

ICTURE GALORE

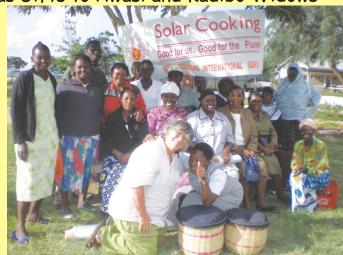




Shirkku and Friends' Christmas Gifts to Awasi and Kadibo Widows







DeeDee visits Kajiado Project



Edward, Olivia and Mukasa , Solar Cooking Promoters (Uganda)



Happy SCOREPS



Tasty Ugali and Sukuma Wiki

MEMORIES ARE MADE 05....

- Cooking and baking from paper the CooKit!
- Flying on a 9 -seater plane through the clouds to reach a refugee camp My, the sky do have pot holes!
- A big welcome from officers of UNHCR in Addis Ababa.
- A Somali elder making a rope from recycled plastic convinced that the inventor should not suffer the death penalty
- A well browned cake emerging from the paper sun cooker the cook happy to practice the baking she had learnt in school some 10 years past.
- Fried omena, as school children get their plates from the kitchen to the outside kitchen, the solar cooker.
- A young man reading, while his food cooks on a solar CooKit, changing cultures.
- A view of Aisha refugee camp from the road and all the tiny shiny stars close to the tukuls all Solar CooKits.



- A mother sewing her CooKit with thread and needle to keep it from falling apart.
- A village woman in Nyakach proud to have a new name: Mama Solar because she teaches about and sells solar cookers.
- The flowing beads, the interplay of colours as the Maasai woman bends to retrieve food from a solar CooKit
- Doubting Thomases, burning their fingers, on

the touch of a black lid that has been in the sun for so long in a solar cooker.

- Displaying the CooKit, next to the huge concentrator cookers, and lo, they all cook!
- Children playing and not collecting sticks since their mothers already had their meal solar cooked.
- A Luo or Luyia man nodding his head and saying the Ugali is well cooked having begun with cold water, flour and the sun!
- A melted WAPI, inside a pot of water, an assurance that the water is safe to drink!
- Prof. Metcalf, bringing the microbiology lab to mere villagers who with wonder, now comprehend how germs multiply into millions, in no time at all!
- The giggles as he explains how to incubate the water samples and imagining the explanations given to inquisitive spouses.
- A donor hearing first hand how his/ her donation and others' is saving lives and reaching into his wallet, doubling his next donation, introducing a new friend / donor.

Memories are forever......

TEACHING SOLAR COOKING IS FUN.

Just like most outdoor activities, teaching solar cooking is fun! First it draws attention to itself, the invited group, then the curious crowd of men women and children. It seeks participation as group members I often get a nice surprise when asked to come forward to cut meat, chop onions, peel potatoes, wash vegetables, mix a cake, mix ugali flour with cold water, add oil and salt to prepared foods ready to be put out in the sun to cook! All these done outside in open view lest some doubt that the foods were raw / uncooked at the beginning! They sigh in surprise as they are told to mix everything in the pot and that once the lid is on there is no peeking or tasting. "Hmmm they wonder, what will it all become?"

More fun follows as they are shown how to capture air with a plastic bag and ensure it is air tight, many village women have never had the fun of blowing air into a balloon, so this might as well be their first certainly not the last, unfolding the CooKit to making it ready for cooking is the next cause of laughter, then the idea of the three stones will be with us forever to raise the pot, there is laughter and amusement all through the process!

Once the food is left to cook more fun is in waiting as members are asked questions on what they have just done. How is the rice prepared for solar cooking? She begins well and misses out on the 1:2 rice to water ratio and hands are flying up, the whole group is correcting her loudly. If one gets it right all the way, there is clapping and at times gifts of a calendar or SuNews to take home. This is a very important session of the whole process as it reinforces learning and breaks the ice between the members present. It also affords those who want the opportunity to

take notes, mind you, the sun continues to cook unattended! The practicality of this session is also in demonstrating to the learners one of the benefits of solar cooking, that you can do other things such as learning, attend a clinic or even just relax while the food cooks.

The waiting is about to be rewarded, it is time to bring out the cooked food. The anxiety of waiting for food to cook while doing nothing is almost unbearable. For when using the fire, they are often hustling and bustling around the fire, over feeding it with sticks, blowing air into it, stirring the food, tasting, they are so involved! Not so with solar cooking! Once they are shown what to do to avoid being burnt by the hot steam, each one grabs a cloth and ..wow, ululations rend the air as they look down on perfectly cooked foods, hot and ready for serving, there is pushing and shoving, suddenly old and young are up singing and dancing to confirm with their eyes that it is truly cooked. As plates are passed around with sampled foods, there is more singing and dancing and from nowhere a song is coined about the wonder of nature, about learning that never ceases, about God's kindness and providence!

As the sun goes to sleep, you collect the CooKits, folding and packing them, you smile, though tired, it was all fun and you are satisfied that you have touched a few lives, you have spread the wonders of sunshine!

Bored? Tired after ten years? Noooo.... the fun has just begun, more and more people are calling, writing and visiting making inquiries the teaching, the demonstration must go on, 1/3 of humanity need to know!

INGREDIENTS.

Cassava Cooking oil Salt

CASSAVA CRISPS

METHOD.

- * Peel 2 medium cassavas and wash well.
- * Slice into very thin slices add a little salt.
- * Oil a solar cooking pan, add the cassava slices and stir lightly
- * Place pan on CooKit and leave for two hours.

NB.Do not cover the pot or use a plastic

MACARONI RECIPE:



INGREDIENTS

1 Cup Macaroni
3 Cups hot water
1 tablespoon of oil
Salt to taste

METHOD:

Toss the macaroni in oil
Add hot salted water, stir and
cover Cook for 1 hour
Optional (Before serving add
two tablespoons
of butter, grated cheese
and fresh chopped basil)

FACILITATING AND EXPERIENCING CHANGE!

Dinah Chienjo, Project Officer, Sunny Solutions.

Towards the end of 2002, I was anxiously waiting for a letter or a phone call, I had been one of the lucky few people to have been short listed for a second interview with Solar Cookers International (EA). They had advertised in the newspapers and were looking for someone with all the attributes I thought I fitted in well.

Then it came, "Congratulations! You have been selected as the new project officer, for our new project in Nyakach!" I was excited but also afraid, barely knowing the challenges that lay ahead. My task as project's officer was to work with a local CBO NYACODA and together we were to introduce a new cooking technology in Nyakach. This was the solar CooKit! Looking back, 5 years down the line, I have no regrets, I am proud to have been involved as facilitator and a beneficiary of the changes I am witnessing in my community. A few highlights are here below:

- There is an enhanced level of awareness in terms of knowledge and skills in Nyakach with regards to cooking technologies. This is all round, for men, women and children. More than ever, there is a greater awareness on the potentials of solar energy. Previous to the project's introduction, a few people knew about solar lighting now they know that the sun can cook food, pasteurize drinking water and also be used to dry / preserve food stuff.
- * For many the knowledge and skill have become a regular habit and this is due to the benefits they reap from actual use of the solar CooKit. Many testify to improved household health due to drinking safe water, eating healthy foods and also avoiding smoky kitchens whenever the sun is shining and this is almost everyday.
- Catching up with the sun this is one of the best impacts that solar cooking has engrained in the Nyakach community. To do this one has to be a good planner, having the next day's food today! In a poor community such as Nyakach, this is not an easy feat, yet solar cooks in Nyakach are managing it.
- Involving women to promote the technology has been a great fillip to the project. First, women are the cooks in this community, and so they are the best advocates for any new cooking technology. They are known and trusted in the community and have managed to sell over 3,000 solar cookers using a slow patience trying lay away / installment process.



- The sales women have improved their own incomes while gaining new capacities to do business, to save and borrow for self improvement. Many are currently saving with a micro lending institution and borrowing to buy assets, cloths, furniture etc. Many testify to gaining a new position in the family as their spouses consult them more, they are participating in decision making in the family more and more.
- The courage and self confidence that these women exhibit is almost unbelievable! They are well known in the community and are easily selected by other agencies to undertake other responsibilities. They stand out and are able to address public gatherings on issues of environment and energy. They have literary come out of their shells! One exclaims, "I have a new title in the community Mama Solar. Am an expert!"

- On the part of school going children, life
 is a little more bearable as they do not
- have to **Dondo!** Literary, collecting biomass residues as the mother cooks to keep feeding the fire. During the day, their lunch gets cooked even in the absence of the mother and they get back to school on time. In the evening the girl child gets to do her homework as the need for firewood is greatly reduced.
- Personally I have had the opportunity to travel to foreign countries like Ghana and the US to present what we have achieved in Nyakach. This was a great eye opener to me as I was able to exchange views with other renewable energy technology promoters.
- When all is said and done, there is only more to be done as more people need to know about and experience what the people of Nyakach are experiencing, the reality of solar cooking!

WHY I LIKE MY WORK, By Julius Otieno Sunny Solutions, Project Supervisor - Northern Zone

Accomplishing a difficult feat! That is how I can describe my work as a supervisor of a technology transfer project. For the past 4 year, I have been engaged in public education, skills transfer and sale of Solar Cookits in one part of Nyakach under the Sunny Solutions project, by Solar Cookers International.

Why difficult? First the technology is for cooking, cooking is generally considered a woman's activity so I had to adjust and get comfortable and learn how to cook different dishes using the solar cooker in order to teach it.

Next is the challenge of selling the technology and not giving it free as is the expectation of people about NGOs. Together with the SCOREPs we have sold a total of 495 CooKits and we have another 414 people paying for their cookers.

Then, I have had to work with 5 very dedicated SCOREPs, these women have been a great source of inspiration and challenge



as they are paid on commission. Their enthusiasm is infectious as they were socialized into their cooking roles right from childhood. I have had to learn a lot from them.

Teaching about a new

Teaching about a new cooking technology, convincing buyers and

collecting payments gradually have all been interesting and challenging. One good lesson has been training my patience.

Other than the challenges, my work has filled me with great joy, especially the moment when the pot lid is removed and the women break out in ululations and song, seeing the steaming cooked food! Their joy is comparable to a team winning the

World Cup

Doing home visits and finding the cooker out in use and hearing anecdotal stories of new recipes successfully tired, of users recounting how they no longer worry as long as the sun is shining they can eat cooked food! Of mothers recounting less visits to health centers due to less incidences of sickness as children drink safe water. Getting requests from far flung communities to take cookers and do a demonstration - All this is work with fun.

Well, this is a story without an end as there are more and more people yet to be reached beyond Nyakach and the sun is free of charge, available clean and environment friendly. I have to pen off.

I can only thank all donors and supporters of SCI, as well as the inventors of the Solar CooKit, please continue to support us!.

5

THERMAL SOLAR IN INDUSTRIAL APPLICATION



The solar steam pilot plant (Left Picture) was recently installed by AltenerSolar at Pwani Oil Products Ltd. At Jomvu, Changamwe, Mombasa. It comprises 2 no. 16 sqm dishes that each deliver 8 KW of thermal power. It is a pilot plant installed with a view of disseminating its performance, to create awareness for industrial and commercial solar thermal applications and also to document its performance. The steam will be channeled into the factory for heating purposes melting crude palm oil so it can be pumped into distillation columns.

AlternerSolar has also installed solar kitchens in Lokichigio Catholic Mission School and Mama Ngina Children's home in Nairobi.

Impact Of Solar Cooking -Indirimi Refugee Camp, Chad

Women and girls who live in the Iridimi refugee camp in Chad face attack and rape by the local population, bandits and the Janjaweed Militia when they leave the camp to gather firewood for their cooking needs. In 2005, "CooKit" Solar Cookers were introduced in the Iridimi camp as a part of an effort to reduce reliance on firewood and in turn improve the safety of the refugee women by lessening the need to leave the camp to collect the wood. In October of 2007, a team of 15 people from eight organizations conducted an evaluation of solar cooking in the camp. The evaluation was undertaken over five days and included interviews with 121 refugees. The team assessed the demographics of those who use the solar cookers, the advantages and challenges of solar cooking and the overall effectiveness of the project in the camp. Below are Key findings from the evaluation process:

- Women are the primary users of the solar cookers
- Most solar cookers are used by the family of three to eight members, using two to three cookers
- Solar cookers are capable of cooking the customary food that would have been made with wood- burning stoves in the past.
- Very few women still use a three stone fire, which represents a significant shift in previous cooking practice.
- Since the cookers were introduced, food rations are rarely sold or exchanged for firewood.

- Solar cooking provides low maintain ace food preparation and allows for increased time to do other tasks and activities.
- Solar cookers are safer than wood burning stoves, which can burn the women who use them as well as unattended children.
- Health issues related to smoke produced by a fire, such as coughing, running noses and eye irritations, are reduced.
- Solar cooking is slower than wood burning methods and requires advance planning.
- Weather, primarily rain, can affect the ability to use the cookers, as well as their lifespan currently two to three months. However, new cookers with added weather protection features are reported to last longer.
- Before solar cookers, many women left Iridimi everyday or every other day to collect firewood; since solar cookers, outings from the camp have been reduced by 86%.
- Solar cooking, and the resulting reduced reliance on firewood, has improved personal security and safety, as well as reduced conflicts with neighbors over resources.
- Many respondents requested more cookers and pots, especially those with larger families

BRAVO to the supporters and implementers!





Solar Cookers International(E.A)

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