

# Solar Cooking Foundation The Netherlands



# Annual Report 2012

# For the reader in a hurry...Solar Cooking NL at a glance



\* Through the use of Solar Cooking ovens, Solar Cooking Foundation The Netherlands (SCN) aims to reduce dramatically the use of wood for daily cooking.



In *Uganda* the market increased and the sale of sustainable cooking appliances went up in Mbarara. A Solar Cooking distribution and training centre was started in Kampala in 2012.



In *Ethiopia*, plans advanced for the construction of 20 Sustainable Energy Centres, within the framework of an important EU project. The recruitment and training of employees is well under way.

Preparations for the construction and development of a *small Solar Cooking enterprise* in the *Awra Amba* community, in the North of Ethiopia, are promising. The construction of the workshop was started in 2012 and the production and sale in this region will get off the ground in 2013.



The NGO ANCEDA established a Jatropha and Moringa seedling nursery in the town of Arsi Negele, the tentatieve beginning of a *reforestation project*.

\*SCN's policy to *reduce subsidies* within 2 to 3 years, continued in 2012. A small ISC business must be independent and realise a profit within that period.



\* In 2012, serious efforts were made to transfer SCN knowledge to East Africa. In March, SCN recruited a staff member in collaboration with HoA-REC/N. The ultimate objective is to create an *ISC Knowledge and Service Centre* in Addis Ababa that has advisory and training capability for East African countries.



- \* Solar cooking appliances must be functional and attractive as well. Although the *CooKit* is a brilliant design, its durability and quality was subjected to serious pressure. In 2012 a *quality improvement* process was initiated.
- \* For the first time SCN's Newsletter and the Annual Report were distributed digitally. SCN's website was revamped thoroughly.



- \* In accordance with our policy, a great deal of time was spent on contacts with international organisations such as Global Alliance for Clean Cookstoves and Solar Cookers WorldNetwork.
- \* 2012 required more emphasis on *fundraising*. In its Newsletter SCN appealed to its donors, which resulted in a handsome return.



\*For the 9th consecutive year, *Wilde Ganzen* provided generous support and so remained our most important donor and partner in The Netherlands.

Clara Thomas

# Solar Connect Association sold 5,565 cooking appliances!

From its new ISC Promotion & Distribution Centre, Solar Connect Association in Kampala started at the beginning of 2012 a campaign in several districts to introduce and promote cooking with solar energy and the use of wood-saving cooking appliances. The results of this campaign are very promising. The centre has more than achieved its first-year objectives. For the period May 2012 through January 2013, the distribution of a total of 3,800 different types of cooking appliances had been planned. In reality this turned out to be 5,565! This result was totally unexpected. It not only included Cookit sets, wood-saving cookers and hay baskets, but also the

more durable solar box cookers and a few far more expensive parabolic cookers.

The majority of the cooking appliances were sold in the districts of Mukono and Wakiso (3,4).

Mukono. Lake οn Victoria. is auite denselv populated. Deforestation is very because severe massive logging for the creation of sugar plantations and the gathering of timber and firewood. The population is very much aware of the environmental problems and receptive to arguments



Map: 1.Kampala, 2.Mbarara 3.Mukono 4.Wakisoin

favour of the adoption of ISC. Wakiso has to contend with alarming deforestation as well and the campaign team was able to reach only a small portion of the population. There is still much to be done.

A positive development is the increasing attention paid by foreign, and in particular Dutch NGOs to SCA's work. These NGOs frequently came to know SCA thanks to SCN's website! They have by now placed a number of orders with SCA for ISC cooking appliances. A tremendous boost for the dissemination of the ISC concept in Uganda!

SCA is planning to expand its range of products by including simple and affordable solar panels to generate electricity. Only 15% of the population has access to the national electricity network. For many the purchase of a simple solar panel is the solution to burn a lamp in their house and, even more importantly, to charge their cell phone...

#### Project period May 2012 - May 2013

- SCN action proceeds to Wilde Ganzen € 18,092
- Bonus Wilde Ganzen 55% € 9.951
- Available for ISC Project Kampala € 28,043



Solar Cookers Sales in Kampala

#### Mbarara (Uganda) sales grow; business premises are too small

As of 2011 SCA's ISC Production and Promotion Centre in Mbarara has been operating fully independently, without any financial support from SCN. In 2012 the production of ISC cooking appliances in Mbarara exceeded that of the previous year, partly due to the supply of ISC products to the SCA centre in Kampala. Sales of ISC products in neighbouring villages decreased slightly. In the near future, serious efforts will have to be made to stimulate sales. With this in mind, specially trained women, the marketers, will organise cooking sessions for groups of women. During these sessions, cooking and other experiences will be exchanged and new clients will be canvassed actively. Most of the marketers are very active and at the same time responsible for cooking session follow-ups in the shape of further house calls.

The ISC centre includes a shop where the complete range of ISC cooking appliances is displayed and cooking demonstrations are held. People are coming from far and wide. Even from villages close to Tanzania and The Congo. Information is handed out at weekly markets in the neighbouring villages, together with cooking demonstrations and sales.



#### Photos:

In the small town of Mbarara an active search is underway for an alternative site for the existing production centre.

The present production and storage facilities are far too small, the more so given the increasing demand for ISC cooking appliances.



Since a different location requires a fairly large investment, the funding issue needs to be solved.

#### Transfer of Solar Cooking knowledge to East Africa

The HoA-REC/N department of Addis Ababa University (AAU), as coordinating organisation, plays an important networking role in Sustainable Energy projects in East African countries. In 2012, SCN became more and more aware that it could become the ideal knowledge network for ISC initiatives and small businesses. Partly at the request of HoA-REC/N to facilitate cooperation with SCN, Fikirte Regassa Beyene was appointed SCN colleague and representative with HoA-REC/N in March 2012 and became member of the EU RET project's Energy team. Fikirte is responsible for the implementation of the Integrated Solar Cooking objectives in all 20 centres.



Fikirte has proven to be a valuable SCN colleague at a distance. An almost daily communication and consultation line with SCN was established. The transfer of ISC knowledge and expertise received a lot of attention. Fikirte joined Solar Connect Association in Uganda for a training course to familiarise herself with their production, promotion and marketing methods. On top of these assignments, Fikirte translated ISC manuals for the production and training of end-users into several local languages.

Moreover, Fikirte developed a number of training programmes for the 200 employees of the 20 RET centres that will be built in 2013.

With the recruitment of its colleague, SCN has taken the first step towards the development of an ISC Knowledge and Service Centre in Addis Ababa. In this respect, cooperation with HoA-REC/N has proven to be an excellent starting point.

SCN bears the cost of Fikirte's salary; she works under the auspices of HoA-REC/N.

#### Project March 2012 - March 2013

- Estimated for 2012 € 6,000
- Spent in 2012 € 8,200 (balance chargeable to SCN Capital)



Fikirte translated SCN manuals and flyers into Amharic. Above the explanation of how to use the WAPI (Water Pasteurisation Indicator)

# Twenty Renewable Energy Centres (RET) in very remote areas in Ethiopia

In previous SCN publications we informed you of the first stages of the EU project Renewable Energy Techniques for households in very remote areas where no electricity is available. It is precisely in these areas that millions of households depend entirely on wood as fuel to prepare the daily food for their families.

As of 2014, the 20 RET centres will operate as small businesses which will produce and sell cooking appliances that run on solar energy, biogas or vegetable oils (e.g. Jatropha). Affordable solar lanterns will be available as well.



The Energy team HoA-REC/N left to right: Meklit Tefera, Fikirte Regassa, Mesfin Kinfu, Alem Degefa and Sisay Lelisa

The Energy Team of the HoA-REC/N department manages the EU project. The 20 centres are distributed among 6 districts in the provinces of Tigray, Amhara and Oromiyo. In 2012, an ultimately responsible NGO for each district was appointed to create the centres; in addition there will be a district coordinator and a renewable energy expert.

During 2 working visits, SCN provided advice on the centres' business approach, on the various duties of a workshop as well as on its impact on their construction and layout.

The usefulness of and need for Solar cooking appliances (clean energy) are recurring topics at project meetings and Internet communications. As is the tendency worldwide, so is most attention focused on the implementation of wood-saving cooking appliances (see GACC p. 16).

SCN saw to it that the Action Plan for Public Promotion and Marketing made room for a more prominent place for solar cooking.

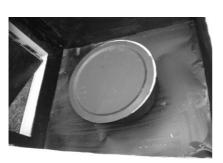
#### SCN contribution to EU RET project financing

- Estimated for 2012 Euro 9,760
- Spent in 2012 Euro 9,760



Improved Solar Box, for a 5-litre pan with a small door at the back to open the box.
Design Bereket Dessie, Addis Ababa.







## HoA-REC/N as a centre for the East African network

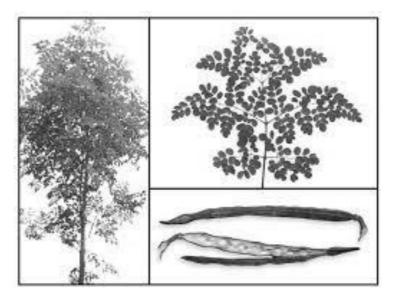
Again in 2012 a lot of effort was put into starting discussions on the development of Renewable Energy networks in East African countries. HoA-REC/N in Addis Ababa takes central stage, not only in Ethiopia but in neighbouring countries as well (including Uganda).

In consultation with Dr Araya, Director of HoA-REC/N, discussions took place on having HoA-REC/N implement ISC initiatives from East African countries.

SCN will refer requests to HoA-REC/N. SCN will further stimulate this development by actively putting the creation of an ISC Knowledge Service Centre at the forefront.

#### Moringa and Jatropha planting in Arsi Negele

End 2011 our partner organisation ANCEDA started with great enthusiasm a pilot project for the planting of Moringa trees in the Arsi Negele region. A small nursery for the production of Moringa seedlings was set up and interested farmers and farmer's wives from the area received training. To the disappointment of all parties concerned this first attempt failed. The selected area turned out to be too high in altitude and therefore unsuitable for the healthy and fast growth of Moringa plants. A lower lying area has now been chosen where the test will hopefully meet with more success.



Moringa

Part of the nursery will be set aside for Jatropha seedling culture. This new attempt to introduce Moringa to the inhabitants will be combined with a modest ISC introduction among approximately 20 farmer families in the region. The women of these families will, at a later stage, become marketers to further promote the ISC idea and the use of ISC cooking appliances.

#### Solar Cooking in refugee camps in Ethiopia

A pilot solar cooking project was initiated this year in the **Kobe** refugee camp (East Ethiopia). ZOA - Addis Ababa implemented the project. PISDA, by now no longer relying on SCN subsidies, organised training of the camp's staff members as well of small groups of end-users. At ZOA's insistent request and against SCN and PISDA's advice, not only the Solar Cookit and Hay basket but also the Solar Box and the Parabolic cooker were presented. All camp residents chose of course the extremely expensive parabolic cooker and not the very cheap Cookit. In the end the pilot project was seen as a failure.

Subsequently, UNHCR requested that Solar Cooking be introduced in the Assossa refugee camp (South West Ethiopia). SCN together with colleague Fikirte were able to explain that it was definitely preferable to start with CooKits and Hay baskets only. The appliances have the advantage that they are affordable, simple and can be made locally.

PISDA has drawn up an action plan and an estimate. Upon approval and introduction in the camp, PISDA organised a 10-day training course. After which PISDA was able to supply the necessary Solar Cookers for the pilot project (800 in 2012 and 1000-5000 in 2013). SCN colleague Fikirte coordinated the entire event.







Introduction Solar Cooking . Different cooking method and what does a CooKitset consist of

# New Small Solar Cooking Business in Awra Amba

After a long start-up period, the NGO ORDA together with the organising committee of Awra Amba village (North Ethiopia) resolutely got the Solar Cooking project off the ground in 2012. When a project plan and detailed estimate covering the first year had been drawn up, SCN and ORDA signed a cooperation contract for a one-year period. If the results are positive at the end of that year, SCN will decide whether to continue to provide financial support for a maximum of 2 to 3 years, after which the ISC business is to operate independently.



During working visit September 2012 left to right: Zumra, Awra Amba leader Enaniye Kibret, his wife and staff member Tekeba Aweke Woreda representative (regional) Ababre Abdella, senior production employee Fikirte Regassa, SCN, HoA-REC/N colleague

In September, Jacomine Immink, Clara Thomas and colleague Fikirte spent a week with ORDA and the Awra Amba group to discuss the action plan and to complete the inventory, material and tool lists.



ORDA staff with Clara Thomas, Fikirte Regassa and Jacomine Immink

In Awra Amba, ORDA, Mr. Zumra (Awra Amba leader) and his staff decided on the building site and style for the Production and Training centre. SCN provided concrete advice on floor plans and layout based on the Solar Cooking Production and Training centre in Debre Zeit.





Another Awra Amba activity is the spinning and weaving by women and men.

Mr. Zumra and his staff disapproved of the CooKit's quality and demanded that the CooKit be made more durable. SCN fully agreed and promised to achieve this. It was agreed that in addition to the CooKit and WAPI, the Solar Box, Hay Basket and woodsaving cooking appliances would be produced as well.

Future building site of the ISC Centre in Awra Amha



ISC Centre under



Coordination, production and training employees have been selected and will be appointed and trained in March 2013. The plan states that production and distribution will start in April 2013. It is very clear that everybody is extremely motivated to create this ISC business. Its business approach is fully in line with the objectives of this very special community.



#### Project September 2012-2013

Estimated for 2012 - 2013 € 25,240
 Spent in 2012 € 13,343
 Payable in 2013 € 11,897

# Financial Annual Report 2012

#### **Balance Sheet SCN**

	2011	2012		2011	2012
Assets	Euro	Euro	Liabilities	Euro	Euro
					_
Bank & cash balance	94,208	62,690	Capital	15,200	12,925
			Fund for knowledge	4,456	3,736
Receivables:			transfer		
SCA Uganda	1,128	1,128			
(transport			Provisions		
aluminium foil)			ISC Project Awra Amba	25 240	11.007
			Ethiopia	25,240	11,897
			SCN representative	C 000	0.500
			Ethiopia HoA-REC/N-SCN	6,000	8,500
			contribution EU project	9,760	9,760
			Other projects Ethiopia	10,000	8,000
			ISC Project Uganda	,,,,,,,	,
			(Kampala)	16,000	0
			ISC Project Uganda		
			(Mbarara)	0	9,000
			Other projects	8,680	0
Total	95,336	63,818	Total	95,336	63,818

#### SCN Statement of income and expenditure

	2011	2012		2011	2012
Income	Euro	Euro	Expenditure	Euro	Euro
Donations received	32,649	32.294	PR & Promotion	3,673	3,600
Interest ING Saving	1,524	1,593	Office Expenses	932	1,281
Account / Triodos			SCN		
Saving Account					
Sales CooKits etc.	312	205	Expenses CooKits,	614	101
			etc.		
Contr. Workshop	100	75	Balance	29,365	29,185
Total	34,584	34,167	Total	34,584	34,167

In the past year, the commitment of our Foundation's volunteers has again been impressive. In 2012 the amount spent on promotion and office expenses remained modest: 15.1 % of the total amount of donations received and other contributions. Breakdown was as follows: Project coordination, PR & Promotion Expenses 11.1% and Office Expenses SCN 4.0%.

# Financing ISC Projects 2012

Project	Euro
Project Uganda (SCA)	
Action proceeds SCN to giro account 40000 Wilde Ganzen	18,092
Bonus Wilde Ganzen (55%)	9,951
Available for ISC Project in Kampala	28,043
Projects Ethiopia	
ISC Project Awra Amba (through ORDA)	13,343
SCN contribution to EU Project HoA-REC/N	9,760
Expenses SCN Representative Ethiopia, also HoA-REC/N staff member	8,200

#### Fundraising

In 2012 donations stagnated in comparison with 2011. Therefore, SCN launched an appeal in its Newsletter to financially support 5 projects in Uganda and Ethiopia.

It is very gratifying to find that so many donors responded to our appeal and that SCN was able to fulfil its 2013 commitments thanks to all these large and small donations. Moreover, many contacts were made with possible future donors.

For many years now, a Dutch company has supplied SCN free of charge with aluminium foil. Aluminium foil is not available in East African countries. SCN owes all donors many thanks because without their contributions projects would not be realised.

In 2012 a total amount of Euro 32,394 was received in income from our own fundraising; substantially the same amount as donated in 2011.

Source	Number	Amount €	Percentage
Private donations of less than €500	118	8,015	24.8
Private donations of €500 and over	8	10,603	32.7
Gifts from various foundations and institutions	8	11,676	36.1
Gifts from businesses (Steder Group BV))	1	2,000	6.2
Total Donations 2012		32,294	100.0



Solar Cooking demonstration Fair Trade shop in Bussum

# Global Alliance for Clean Cookstoves (GACC) and Solar Cookers Worldnet (SCWNet)

The Alliance, partner of the United Nations Foundation, seeks to supply 100 million households worldwide with Clean Cookstoves by the year 2020 as part of the Millennium Development Goals. Up till now, these Clean Cookstoves consist exclusively of cooking appliances that require solid (wood) or liquid (kerosene) fuels. Research shows that these cooking appliances are not Clean and do indeed cause dangerous emissions of a.o. fine particles.

In 2011, discussions on this subject got off the ground slowly and it was argued that solar cooking appliances needed to be included. In 2012, SCN emphatically raised this issue with GACC. At the same time SCN redoubled



its communications on the subject with SCWNet. As a world organisation, SCWNet is an important discussion partner. This year again discussions turned out to be a problematic; GACC is a powerful world organisation, with enormous subsidies but up till now it is hardly receptive to the only truly Clean Cookstoves: Solar Cookers.









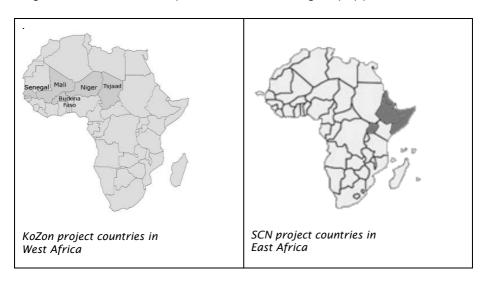


SCN's Integrated Solar Cooking (ISC) set includes Solar cooking as well as woodsavina cookina appliances.

On cloudy or rainy days, cooking can be done indoors or outside

## Cooperation with Foundation KoZon

This year again, Kozon, our partner organisation with the same objectives as SCN, implemented a number of successful ISC projects in West African countries. Our two organisations seek closer cooperation. We consulted regularly by phone.



# Research at Vrije Universiteit Amsterdam

Cooperation (since 2 years) with the Vrije Universiteit Amsterdam, Physics department, has intensified. A number of first year students research each year possibilities to improve the Solar Box's efficiency. The focus is at present on the relationship between the reflective power of aluminium foil and the speed of the temperature rise in the Solar Box. Once a year the research results are discussed with SCN.



# Training days in Kortenhoef

One training session was held in 2012 for people who want to introduce Solar Cooking in (mainly) African countries. Two participants from Belgium want to introduce Solar Cooking in The Congo and one participant came from KoZon. The training sessions focused on SCN's approach as well as on the making of a CooKit and a WAPI (Water Pasteurisation Indicator). As

quality improvement of the CooKit becomes more and more important, at future training days the CooKit will be painted on the outside and the edges will be finished with fabric strips.

It is always interesting to learn of each other's plans and ideas.

## CooKit quality improvement

Of late, the limited durability of the cardboard CooKit has been a regular topic of discussion. The SCN work group has tested various techniques to reinforce the cardboard edges and to make the CooKit more rainproof. These improvements have for some time now been applied in Uganda. Users are more enthusiastic about the CooKit's appearance and it is more durable. A lot of attention was paid to finding the right quality cardboard at the lowest possible price for a much more durable CooKit.



Fikirte discussing with Mr.Satish, of the cardboard factory. The topic is the choice of the best quality cardboard for the manufacture and use of CooKits. In front of him the samples made by SCN in The Netherlands.









Samples of reinforcement of the CooKit's insert slots and edges. Far right an idea of CooKit decoration.

#### **Abbreviations:**

WG - Wilde Ganzen (Wild Geese)

HoA-REC/N - Horn of Africa Regional Environment Centre/Network

RET - Renewable Energy Technology SCA - Solar Connect Association

SCN - Stichting Solar Cooking Nederland (Solar Cooking Foundation The

Netherlands)

KoZon - Stichting Koken met de Zon, Wageningen (Foundation Cooking

with the Sun)

PISDA - Partnership for Integrated Sustainable Development Association

NGO - Non-Governmental Organisation

ISC/WP - Integrated Solar Cooking/Water Pasteurisation

WAPI - Water Pasteurisation Indicator

GACC - Global Alliance for Clean Cookstoves

AAU - Addis Ababa University

UNHCR - United Nations High Commissioner for Refugees
SCI - Solar Cookers International, California USA
SCWNet - Solar Cookers WorldNet, California USA











#### **Solar Cooking Foundation The Netherlands**

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# **CooKit Manufacture**



First apply glue on cardboard, then rub foil onto cardboard



Let the foil dry thoroughly, then cut the CooKit with a template



Painting of CooKit as quality improvement and a better appearance



Cut strips of fabric to glue around the edges to protect the CooKit



Fold the CooKit



Folded CooKit, ready to put in bag