## 20 Years Solar Cooking and Integrating Other 'Green' Projects in Nepal

## By Allart Ligtenberg

A lot has happened since 1992, exactly 20 years ago, when Allart initiated solar cooking and water pasteurization programs in Nepal when this method was not practiced and he found Centre for Rural Technology (CRT) receptive to put this into their other programs.

For instance, in 2000 he installed a collapsible parabolic solar cooker of his design on Everest Base Camp for an environmental cleanup expedition (video on <u>http://tinyurl.com/ligtenberg</u>). And in 2008 Dawa Steven Sherpa placed Allart's Backpack Solar Trekkers Cooker on top of Mount Everest making a statement to the world.



At <u>http://solarcooking.wikia.com/wiki/Allart\_Ligtenberg</u> are links that cover how my programs were expanded since 1992. First with solar dryers that preserve high quality fruits and vegetables that produce income, often for women:



Then around 2001 the <u>Integrated Cooking Method</u> added fuel-efficient, smokeless "<u>Rocket stoves</u>" and the <u>heat-retention cookers</u> to the mix.



Rocket stove and heat-retention cooker used in rural villages



Parabolic solar cooker and heat-retention cooker basket used in mountain villages

A FURTHER INTEGRATED APPROACH of "Green" solutions offered complete health, energy, environment-friendly solutions by adding solar space heating, photovoltaics, efficient WLED lighting, composting, toilets, and biomass briquettes from waste for fuel.

After joining the Rotary Club of Los Altos, California in 2002, Allart organized and participated in 22 Rotary Matching Grant programs in 10 years (18 for Nepal, the others for Indonesia and Afghanistan). These programs include many of the above

solar and other integrated/"green" solutions resulting in awareness creation, training, fabrication and distribution of solar and sustainable devices, empowering women and the disabled, combating poverty through economic development, improving quality of life for 4050 families (29000 people) - "One Village at a Time". For most Rotary projects, Allart selected the very capable Foundation of Sustainable Technologies (FoST) as the Nepalese "Cooperating Organization" to help implement these projects. The last 3 years we also have been focusing on the disabled, the "forgotten" groups that have no hope, by teaching them how to make bio-mass briquettes from waste, providing income for leprosy patients, blind, wheelchair, HIV/AIDS and mentally handicapped.



Leprosy patients couple and blind man pressing briquettes from biomass waste

EWB/Nepal and the <u>School of Renewable Energy</u> were the other cooperating organizations that were involved in remote areas teaching health, green technologies, plus vocational training in carpentry, metalworking and small-business. Skilled workforces of entrepreneurs will disseminate RE technologies and create jobs.

Allart visits Nepal each year for 2-3 months to follow up on Rotary projects and other solar, green and humanitarian projects, working with other NGOs, schools, Scouts, Rotaract groups while starting new initiatives. His ultimate goal is together with NGOs work towards "Centers of Excellence" where all these technologies are being used, taught and demonstrated.

## Notes:

• In Nov 2001 SCI's Newsletter "Nine years solar cooking in Nepal": <u>http://solarcooking.org/newsletters/scrnov01.htm#Nine%20years%20of%20solar</u> <u>%20cooking%20in%20Nepal</u>

- In 2007 a conference paper on Allart's 15 years of Nepal projects in the World Renewable Energy Conference in Jakarta. <u>http://tinyurl.com/a8vap7x</u>
- July 2012: Allart's solar cooking projects are covered by the Rotarian Magazine: The Sun Also Cooks and Harnessing the sun's power to cook