
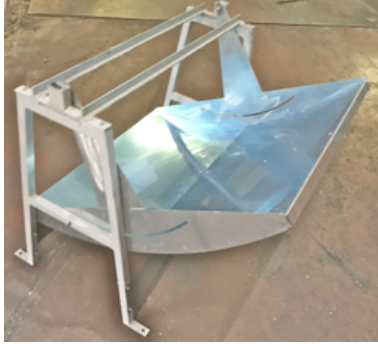


	n°: 033	Country: Subsaharian Africa	Sites: Garissa and Isiolo (Kenya)
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	Project: Solar Cookers	
Ambito	Use of resources	
Partners	in Italy: - Wind & Sun - Genoa in Kenya: - NGOs Hakimani and MAGIS - Nairobi	
Problems to be faced	<ul style="list-style-type: none"> • Lack of firewood in many arid countries • Research difficulties and high cost of firewood • Possible fighting between populations and refugees to collect firewood 	
Operating modes	Wind & Sun has made available a innovative project of solar cooking and ensured the presence of a technician for the first on-site training. The planned program is: <ul style="list-style-type: none"> • Construction of 4 to 5 prototypes • Experimentation with many communities in Africa with continued assistance throughout the first year • Implementation of any improvements based on the results • Promotion of solar cookers by NGOs, UN, UNHCR, EU, others • Manufacture and distribution of solar cookers in Kenya or other countries 	
Beneficiaries	For the first phase 2 villages / communities. Other villages, communities or refugee camps for successive phases, to be implemented after positive results in the first phase.	
Expected results	Significant reduction of wood costs and of conflicts for hoarding it. Guarantee to have drinking water. Testing of prototypes for offering them in a larger scale. Possibility of encouraging the creation of factories with local labour for producing solar cookers in Kenya and/or in other African countries.	
Year of beginning	from 6/16/16 and 4/3/19	
Why was the project closed?	The tests in Kenya on the first 4 prototypes gave a negative result, so it was not decided to move on to later stages.	
Project's costs	7.401,77 €	

(see next page)

Main features of the proposed solar cookers:

- Linear parabolic mirror that focuses the beams along a line and does not oblige to follow the sun by rotating the mirror several times during the day, but only about every week,
- Low cost of construction, transport and maintenance,
- Cookers can be built without difficulty on site,
- Simplicity of installation and horizontal alignment (you only need to observe the surface of the water inside the pot),
- Very easy to use,
- No smoke and therefore no respiratory problem,
- It can also allow water purification.

Problems encountered during the experimentation:

- malfunction in the presence of cloudy skies and / or wind: the water does not boil and cooking is not possible
- rapid deterioration of the reflective surface if not conserved in protected areas, difficult to find in villages
- we tried to solve the problems in the 3rd mission, but without results.