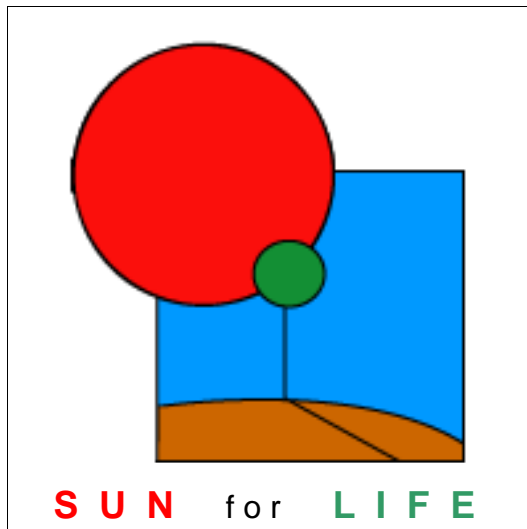


# SUN for LIFE

www.sunforlife.org

self constructed solar cookers  
nutrition and reforestation



## ACTIVITY REPORT 2005

### PARTNERS

#### **GHFP - Guerrand Hermès Foundation for Peace**

GTZ, PLAE, Marovoay, Madagascar  
Lions Club, Antalaha, Manakara, Toliary, Madagascar  
Médicap, Antananarivo, Madagascar  
L. A. Ranjeva, Manakara, Madagascar  
Rotary Club, Antsiranana, Mahajanga, Toliary, Madagascar  
SEECALINE, Antananarivo, Madagascar  
Service Civique de la Présidence de la République Malagasy  
USAID, ERI, Fianarantsoa, Madagascar

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## introduction

since 1997, our experiences shows that the best option is to train volunteer, mobile and convinced women, they shall be our best ambassadors to their sisters and they shall be able to initiate and sustain these essential changes in attitude, we also noticed the importance of informing, educating et training the children -tomorrow's adults– during their educational, leisure or social activities



wood and charcoal, allways and everywhere

long term results are possible only when preceded and accompanied by:

- awareness about the problems related to local environmental degradation
- consciousness about their effects and consequences on both health and economy
- integrated solutions, suggested and accepted, in order to change these situations
- responsabilisation and self-appropriation of actions initiated by local trainees and trainers
- adapted training techniques and tools
- flexible framing and advising structures
- follow-up actions in the field
- partnership with existing local groups on a volunteer basis

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## our first mean of action the solar cooker

we instruct our field trainees on how to construct their own solar cooker with the materials listed hereafter

for a unit price **of less than EUR 1.50**, which corresponds to the weekly amount spend by a family to purchase charcoal in order to cook their food!

they also learn the daily use of their solar cooker, how to maintain it, this cooker will **cook any food** (meat, fish, vegetable, grain, roots) **in less than 3 hours** and **allows**, with average sun conditions, **to cook two meals per day**

the solar cooker acts like a 'heat trap', the average temperature reaches **120°C**

as opposed to fast cooking (gas, kerosene, charcoal, etc), slow cooking with lower temperatures (solar or steam cooking) **preserves the foods' nutritional values** contributing to better health standards, furthermore, eye and lung diseases are reduced due to the absence of toxic smokes



### **this is a passive way of fighting desertification**

as wood, kerosene or gas are replaced by permanent and free sun energy

#### List of materials needed for one solar cooker

2 **strong four-flapped cardboard boxes** (L60cm x W50cm x H50cm) / household **aluminium foil** / paste or **glu** / **black non-glossy paint** / 2 straps of **strong cloth** (2,50m x 6cm) / 1 **large needle** (for leather or mattresses) / **fine and strong string** (20m) / 1/3 m<sup>3</sup> vegetal **insulation** (straw, raw cotton, etc) / 2 **flexible and strong sticks** (1,70m) and 1 **stick** (70cm) / 1 big **sharp knife** / 1 small **straight piece of wood** (40cm approx) to help cardboard folding / 1 **stone** (1kg) and 4 **stones** (3kg) / 1 sheet of **transparent plastic** (160cm x 160cm) / 2 medium sized **pans**, lids closing tightly, painted black

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## our second means of action

**the moringa oleifera** (ananambo, brède moringue, felimorongo, morongo, anamorongo, drum-stick, moranga khai, neverdei)

this tree, known by the Malagasy for the use of its leaves in the national dish named *romazava* or as a garnish for fish and shrimp dishes, is still widely underused considering its astonishing nutritional, medicinal and crop values, most people simply ignore that it produces fruits because they continuously cut the young branches to harvest the leaves

this is an active way of fighting desertification

### fruits nutritional summary

2 x more proteins than in milk, 3 x more potassium than in bananas, 4 x more A vitamins than in carrots, 7 x more C vitamins than in oranges

furthermore, the *moringa oleifera* has more than 30 % fat content



### seed cultivation vegetative summary

quick growth, up to 5 meters the first year  
vertical roots which stabilize the soil  
naturally rich fertilizer from fallen leaves  
seeds and leaves which help water purification, feed cattle and are used as bio-menure

### cultivating seedlings, tree nurseries

avoid rich soil, the *moringa oleifera* grows best in arid soils (max 1/3 rich earth for 2/3 sand and/or poor earth)  
plant seeds at a depth of 3 cm, water only every two days and protect from direct sun (with sisal, raphia, etc) until the plant reaches a height of 50cm  
**for reforestation:** transplant to selected area and protect from predators (beef, sheep, goats) until it reaches a height of 2 m  
**for nutrition:** plant the seeds every 1,50 m and protect from predators (hens, goats, etc) by a fence or shrub

### IGA, income generating activities

fruits, leaves and flowers for human nutrition  
fruits, leaves and seeds after oil extraction as cattle food  
dry crushed seeds mixed into food for rabbits, fish, etc  
oil for cooking, cosmetic industry and as biofuel for diesel engines

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## SUN for LIFE's ethics

- secure and optimize our the efficiency of our action
- avoid creating situations of dependence
- create and strenghten attitudes and behaviours leading to self-empowerment
- preserve the human relationship in our field work, one of the succes factors of our missions



this statement, as it relates to our operation strategy *in situ*, differs from that of other humanitarian NGOs because we try to respect the following guidelines:

- expenses are limited to field needs (ie: the airline ticket price is the highest expense in a standard mission)
- limited number of foreign staff in a mission
- volunteering partnership with existing local field groups
- free or low-cost ground transportation
- simple food and accommodation, preferably with local families

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## a SUN for LIFE field mission

a mission should be considered only if the following minimal requirements are in place:

- a) written request for a mission from local groups
- b) Identification of possible networking field workers
- c) pre-planning done with a minimum of three local partners

### 1<sup>st</sup> phase

visit various areas  
analyze needs and materials availabilities  
grass-root contacts with elected partners  
skills evaluation

### 2<sup>nd</sup> phase

raise public awareness via local medias  
visit of confirmed and prospective partners  
workshops for individual solar cooker construction  
(in)formation and training for *Moringa Oleifera* nurseries  
handing over field responsabilites to the local groups

### 3<sup>rd</sup> phase

support  
évaluation  
follow-up

NB: the development of a mission, the geographical, climatic and political paradigms may frequently lead to an interaction between phases 2 and 3

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fours solaires en auto-construction  
nutrition et reforestation

## our activities in 2005

### in Madagascar

partnership agreements for local actions are increasing (see following page), the effectiveness and simplicity of the solutions we offer are widely accepted; local, regional and national authorities are supporting us and proposing consistent field actions with us

the regional and national organization of SUN for LIFE is ongoing and we are glad to confirm the following commitments (voluntaries until sufficient funds are provided):

**national coordination:** Nirina [coordnattnr@sunforlife.org](mailto:coordnattnr@sunforlife.org)

**regional coordinations:**

Antsiranana:	Odile	<a href="mailto:coordregdsu@sunforlife.org">coordregdsu@sunforlife.org</a>
Fianarantsoa-Manakara:	Sahondra	<a href="mailto:coordregfnr@sunforlife.org">coordregfnr@sunforlife.org</a>
Mahajanga:	Alphonsine	<a href="mailto:coordregmjpg@sunforlife.org">coordregmjpg@sunforlife.org</a>
Toamasina:	Zoé	<a href="mailto:coordregtmt@sunforlife.org">coordregtmt@sunforlife.org</a>
Toliara-Tolagnaro:	vacant	<a href="mailto:coordregtol@sunforlife.org">coordregtol@sunforlife.org</a>



### against deforestation

during 2005, we have organized 38 self-constructed solar cooker workshops and have trained 526 trainees, among which 75 field trainers with a direct impact on 203 communities throughout the entire country

follow-up and evaluations shall be performed by our coordinators during their visits

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## in Madagascar (continued)

### for nutrition, reforestation and IGA

the 38 workshops we organized allowed us to plan 122 personnel of moringa oleifera, 7 medium sized (approx 1 ha) tree nurseries and 35 large tree nurseries for reforestation, nutrition, agriculture and complementary income

**partnership agreements** concluded in Madagascar in 2005:

ACP, aumônerie catholique des prisons, Antalaha et Antsiranana  
ADMINISTRATION PENITENTIAIRE, Antalaha, Antsiranana, Manakara  
AGRICULTURE, direction régionale, Antananarivo, Antsiranana  
ANAE, Association Nationale d'Actions Environnementales, Fianarantsoa  
CARE, Antalaha, stabilisation des talus de la nouvelle route Antalaha - Sambava  
CARE, nutrition, stabilisation des canaux d'irrigation et bassins versants, Toamasina, Tolagnaro  
CROIX ROUGE, Fianarantsoa, Mahajanga, Manakara, Marovoay  
FAFED, fédération des associations de femmes et de développement, Mahajanga  
GTZ-PLAE, lutte anti-érosive, Marovoay  
MDM, médecins du monde, Antsiranana  
POPULATION, cellule environnementale, Antananarivo; Direction Inter Régionale, Mahajanga  
REGIONS: DIANA, Antsiranana; HAUTE MATSITRA, Fianarantsoa  
ROTARY, Antsiranana  
USAID, ERI, Fianarantsoa

after visiting prisons and interviewing an advisor to the Ministry of Justice, a specialist of penitentiary administration, and having seen the nutrition lacks of the prisoners, we plan to spread the cultivation of *moringa oleifera* in all available penal camps

## in Switzerland

we had the opportunity to exhibit our work during a 'sustainable development week-end in Geneva 'Agenda 21', our booth welcomed approximately 150 persons per day and the audiences concern for the nutrition and desertification issues and positive reactions to the simplicity and efficiency of our answers to these problems was constant throughout this event; we shall again participate to the coming event during summer 2006



## in France

conferences and fundraising

## generally

lack of funds obliges us to keep several missions in Asia, Africa and South America on hold and prevents us from continuing our work in India, Peru and Ethiopia

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## our field partners

ACP help to prisoners  
Antalaha, Antsiranana

AIDE & ACTION environnement, health, éducation  
Toliara

AGRICULTURE, MINISTERE  
Antsiranana, Mahajanga, Manakara, Toliara

ALLIANCE FRANCAISE  
Antsiranana, Fianarantsoa, Manakara, Toamasina, Tolagnaro

ALT improved wood cookers, environnement  
Tolagnaro

ANGAP national parcs, environnement  
Antalaha, Antananarivo, Manakara, Toamasina, Toliara

ASOS health, nutrition  
Tolagnaro, Toliara

BANQUE CENTRALE materials supply for our solar cookers  
Antananarivo, Fianarantsoa, Mahajanga, Manakara, Toliara

BCI écotourism, environnement, peasant fédération  
Manakara

BEL AVENIR health, environnement  
Toliara

CARE environnement, AIDS  
Antalaha, Sambava, Toamasina, Toalgnaro

CALA comité d'aide aux lépreux d'Antalaha soins, education, nutrition, environnement  
Antalaha

CRAM cercle régional agricole de Manakara  
Manakara

CROIX ROUGE  
Mahajanga, Manakara, Marovoay

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CTHT centre technique horticole de Tamatave  
Toamasina, Tolagnaro

ENVIRONNEMENT, EAUX & FORETS, MINISTERE DE L'  
Antalaha, Mahajanga, Manakara, Toliara

'ENFANTS D'ABORD, LES' nutrition, health, education for street children  
Antsirabe

FAFED, Fédération des Associations de Femmes et de Développement  
Mahajanga

FARITRA region leaders  
Antsiranana, Fianarantsoa, Manakara

FEMMES AFRICAINES, ONG women's condition  
Analalava

GTZ-PLAE, Anti Erosive Program, German Cooperation  
Marovoay

INTER AIDE health, hygiene, agriculture, education  
Manakara

LION'S CLUB  
Antalaha, Manakara, Toliara

MAIRIES, townhalls  
Antalaha, Katsepy, Mahajanga, Manakara

MAISON D'ARRETS, prisons  
Antalaha, Antsiranana, Mahajanga, Manakara

MDM, Médecins Du Monde  
Antsiranana

MEDAIR cyclonic prevention, hygiene, water purification  
Tolagnaro

PAM programme alimentaire mondial, world food program  
Tolagnaro, Toliara

POPULATION, MINISTERE DE LA, de la protection sociale et des loisirs  
Antananarivo, Antsiranana, Betioky, Mahajanga, Manakara, Toamasina, Toliara, Tolagnaro

PRESENTATION DE MARIE, LYCEE  
Manakara

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## RADIOS

HAJA Antsirabe, MAMPRITA Fianarantsoa, MBS Mahajanga, RNA Toamasina

## ROTARY CLUB

Antsiranana, Mahajanga

SAGE, help for environmental management service

Mahajanga

SEECALINE, nutrition, education

Antalaha, Antananarivo, Mahajanga, Manakara, Toamasina, Tolagnaro, Toliara

SERVICE CIVIQUE DE LA PRESIDENCE DE LA REPUBLIQUE MALAGASY

Antananarivo

SŒURS TRINITAIRES DE ROME women's condition

Antananarivo

SOKAKE environment

Tolagnaro, Toliara

SOS VILLAGE D'ENFANTS housing, health, nutrition, education, environment for orpheans

Mahajanga, Toamasina, Toliara

STABEX agricultural promotion

Manakara

## TELEVISION

MBS Mahajanga; RTA Antsirabe, Toliary, TVM Antananarivo, Mahajanga, Toliara

USAID-ERI, agricultural support

Fianarantsoa

WWF - World Wildlife Fund

Toliara, Tolagnaro



Toamasina après after monsoon rain

## acknowledgements and thanks

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## MISSIONS WAITING FOR FUNDS

countries in which SUN for LIFE must follow up its missions, finish the set up of autonomous structures or reply to formal intervention requests (non exhaustive list): Bolivia, Burkina, Ethiopia, Guatemala, Haiti, India, Indonesia, Kenya, Madagascar, Mali, Mongolia, Myanmar, Nepal, Nicaragua, Peru, Phalestine, Togo, Uganda, Viet-Nam

## MISSIONS CARRIED OUT

the term of 'group' that we refer to in this report should be understood as any human gathering: district, parish, tribe, village, community, town, hamlet, camp, slum, etc

### 2005

**AFRICA** Madagascar : Antananarivo, Fianarantsoa, Mahajanga, Manakara, Toamasina, Tolagnaro, Toliara and surroundings  
2 1/2 months, 147 trainers, action spreading on 117 groupes, 43 individual nurseries and 6 large nurseries for the *Moringa Oleifera*

### 2003 - 2004

**AFRICA** Madagascar: Mahajanga, Toamasina, Tolagnaro, Toliara and their provinces  
17 weeks 187 trainers, 39 solar cookers, action spreading on 246 groups, 41 nurseries for the *Moringa Oleifera*

### 2003

**LATIN AMERICA** Peru: North -West, Lima slums and surrounding areas, Cordillera of the Andes  
5 weeks, 50 trainers, 18 solar cookers, action spreading on 85 groups

### EUROPE

Switzerland  
demonstration to the UN delegates of autochtons and refugees camps  
2 days, 9 trainers, 4 solar cookers, spreading on 13 groups

demonstration to an NGO training field workers for humanitarian actions abroad  
1 day, 15 trainers, 3 solar cookers, spreading on 12 groups

### 2001-2002

**INDIA** Rajasthan, Gujarat, Tamil Nadu  
3 months, 113 trainers, 37 solar cookers, spreading on 115 groups and 9 local NGOs

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## 2001-2002

### AFRICA

Jibuti: town and region

2 weeks, 22 trainers, 6 solar cookers, spreading on 6 groups

Ethiopia: Addis Abeba region, East-South-East region

2 weeks, 14 trainers, 6 solar cookers, spreading on 8 groups and 1 NGO

### EUROPE

Switzerland

demonstration to the UN delegates of autochtons

one day: 5 trainers, 2 solar cookers, spreading on 6 groups

## 1999-2000

### INDIA

Tamil Nadu, Rajasthan

contacts, research work, training, in two months, 112 users trained, 39 solar cookers

organization of an "Art Market" in Geneva, and a concert with the choir "Calliope" of Lausanne, in Geneva, in order to promote SUN FOR LIFE activities and collect funds

## 1998-1999

### INDIA

Tamil Nadu

individual action for solar cookers construction: in three months, 92 users trained, 24 solar cookers

## 1997-1998

### INDIA

Tamil Nadu, Kerala, Karnataka

personal research and training, in three months, 50 village women trained, 15 solar cookers



canoe, truck, bac, bus ... and walking to get to training place

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