

## **Report: Solar drying in Dominica 15. June until 10. August 2010**

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### **Abstract**

Martin Vosseler –a Swiss Doctor who is very committed to care for mother earth – asked me, if it would be possible to come to Dominica and collaborate with the sun for drying mangoes. In June I started to test a tunnel-dryer and as it worked very good – even with rain and high air humidity – I approached interested people so that the benefit of this appropriate technology can benefit more people.

There were 3 days trainings in Roseau and Grand Bay. 15 dryers got produced - most of them by the owners themselves. Now it is very important to take care, that the existing “family dryers” are used and maintained correctly in order to become a base for further sun-benefits.

A local coordinator (Catherine Ormond) shall remain connected with the solar drying community in order to support them and to exchange enhancing practices and experiences with all of them.

### **Tests in Portsmouth**

The first tunnel-dryer got realized in Portsmouth. The tests were encouraging. Local people, who were not to shy, came to test the dried mangoes and finally the grafted ones were most appreciated.



## **Workshops**

In Roseau the first 3-days workshop was organized together with the carpenter Patrick Simon. He now has his own dryer and his son is already reproducing them in mini scale...



All participants of the workshops learned, how to produce, maintain and use the dryer. Most of the dryers are running with two 5 Volt Mobile telephone chargers which only make the ventilator run. The consumption of electric energy is only 1 % of the energy used for drying fruits and other products. So the dryer with the electric chargers for the fan are still 99% (thermal) solar tunnel dryers.





### **One application with 10 watt solar panel on the roof of the building**



The group around Francilia Daroux in St. Cyr has a borrowed 5 watt solar panel on the roof of the education building. The solar panel costs around 100 US\$ and is far too expensive for most of the households in Dominica. There is additionally an economic factor, if people from Dominica buy a panel from industrialized nations: The money does not benefit people in Dominica, because it is leaving the island...

### **Sustainable Development and support of self-reliance**

Many people do not know dried fruits now. My experience was, that if people had the courage to try the new form of fruit, then most of them wanted a second and third and... piece... I am sure, that dried mangoes are becoming very popular e.g. in December – just try.

We cannot improve the quality of life with solar- and renewable energy sources alone. A great potential in Dominica is to care for less harmful energy consumption. For example the cars could consume much less diesel and petrol, if the drivers would stop the engine when the vehicle is not in move.

Dominica has still many natural resources like forests, fish, clean water, healthy soil and so on. The influence of the 'American way of life' though will destroy more and more nature, if Dominicans are not open to learn from other countries and islands like e.g. Haiti.



A good example is e.g. George Williams near Portsmouth who is since nearly three years off the grid. His windmill is charging batteries (this has some negative side effects though). People who want to improve independency – also e.g. in natural agriculture, should network and exchange their knowledge and wisdom.

## **Convection Solar drier in Paix Bouche**



In Paix Bouche, there is since years a solar dryer in a room of the council office – nobody did benefit from it until now. Recently young girls want to become active and install the dryer on the roof in order to produce dried fruits and benefit from it. Let's hope, they will find friends who will support them.

## **Some further thoughts:**

The density of people in Dominica is 110 human beings per km<sup>2</sup>. If you compare it with e.g. Haiti (350 human beings per km<sup>2</sup>) then one can think, that erosion and lack of trees will never happen in Dominica. Yes, that is true, if family planning as a human right AND caring for nature is applied correctly. Unwanted pregnancies AND exploitation of mother earth are creating unnecessary suffering – just look around you. The director of the Dominica Planned Parenthood Association (DPPA) in Roseau is happy to explain you, why it is so important, to care, for balance between nature and human beings.

Hinche – Haiti, 18. August 2010  
alec gagneux.



## **Connections for better life quality - work together – enjoy together:**

- ☞ Carpenter - Patrick Simon in Roseau > Phone: 316 45 40
- ☞ Carpenter - Phillip Nelson in Grand Gay > Phone: 265 19 32
- ☞ Carpenter - Leslie Joseph in Marigot > Phone: 245 82 39
- ☞ Coordinator - Catherine Ormond > Phone 277 55 61/ [kathom2002@yahoo.com](mailto:kathom2002@yahoo.com)
- ☞ Solar Panels - Fitzroy Armour > Phone 616 18 04 [whale\\_dive@yahoo.com](mailto:whale_dive@yahoo.com)
- ☞ General Facilitator – Willie Fevrier > Phone 235 38 28 [dppa@cwdom.dm](mailto:dppa@cwdom.dm)
- ☞ Natural Farmer – Marcus Thomas > Phone 225 77 44
- ☞ Windmill – George Williams > Phone 315 73 17 [adstation2000@yahoo.com](mailto:adstation2000@yahoo.com)
- ☞ Solar Dryer Paix Bouche – Mrs. Adel > Phone 445 41 27 [dela\\_2@hotmail.com](mailto:dela_2@hotmail.com)
- ☞ Seamoss – John Robin > Phone 235 66 50 [benjoseamoss@cwdom.dm](mailto:benjoseamoss@cwdom.dm)

Solar Dryers> [http://www.solare-bruecke.org/Bauanleitungen/Tunneltrockner\\_dt.pdf](http://www.solare-bruecke.org/Bauanleitungen/Tunneltrockner_dt.pdf)  
[http://www.hc-solar.de/Ghana\\_trockner\\_cm.PDF](http://www.hc-solar.de/Ghana_trockner_cm.PDF)

more education can help us only, if it produces more wisdom --- e.f. shumacher – small is beautiful

**Attatchments:**



## flyer for a training

### Solar Dryer Training

#### When:

From Thursday, 5. August – Time 10<sup>00</sup>  
until Saturday, 7. August – Time 17<sup>00</sup>



#### Where: In the workshop of Mr. Philip Nelson in Grand Bay

(close to Grand Bay Tourism and Environment Committee (GTEC)), opposite the factory shed, above the Coal Pot soap-making enterprise). If you do not find, please contact Mr. Willie Fevrier – Tel: 235 38 28 for guidance.

#### Aims:

- Self – reliance of local people shall be enhanced.
- Fruits, like mangoes, shall benefit the families in villages throughout the year.
- The technology shall be simple and affordable for families and communities.
- The dried products shall be storable for at least 6 months without additional requirements of energy (freezer, fridge)
- The products shall primarily benefit the families - only if there is abundance of dried products, they shall be sold (priority: local market)
- By producing the dryer together, we learn how to reproduce it – so the participants (they become teachers) can re-produce more of these dryers in their villages.

#### Work:

We start by preparing fruits and filling it into an already produced dryer. Producing dryers together in small groups per dryer - step by step with explanations

Practical information about solar energy, self-reliance, quality of life, prevention of unwanted (side-)effects.

Open space

**Conditions:** (Material cost for one dryer is EC 300.- (without stand and solar photovoltaic panel)

Only good motivated women and men should participate.

Participation Fee: between EC 50 and 1'000.- for each participant (dependent on how wealthy the family is).

Fee for Dryer: between EC 100 until 1000.- for each solar dryer (dependent on how wealthy the family of the owner of the newly produced solar dryer is).

It is important to participate **3 days**.

#### Registration until 2. 8. 2010

Please register as soon as possible by phone (617 15 96) or by mail ([alecgagneux@hotmail.com](mailto:alecgagneux@hotmail.com))

#### Questions/ Suggestions:

Please contact me, if you have questions and/or suggestions

#### Contact:

Alec Gagneux 617 15 96; [alecgagneux@hotmail.com](mailto:alecgagneux@hotmail.com);