

ESFRITA Solar Dryer



Why to choose this solution?

Fresh fruits are highly perishable and bulky commodities because they contain high moisture. Solar drying of fruits and vegetables enhance the shelf life of fruits and vegetables.

Savings per day or production:

"Drying of crop produces to a form which has a longer shelf life and adding value to the original fruit helps the farmer not only to overcome the spoilage and losses, but also fetches good price due to the newly added value and to achieve the multiple benefits of crop drying."

Cost in money and in own time to construct:

"The solar dryer of 2.5m height and 1.5m width cost Tsh 1,700,000/= (UDS 737)"

Lifetime:

It has been used for more than 5 years without any repair.

Maintenance needed:

"After 5 years, repair of plastic nylon is needed."

Resources needed in use:

Just good solar radiation

Problems and limits:

"During rainy season, the product cannot be dried quickly"

Where and how can you get it or make it?

It is available at ESFRITA Group in Moshi Kilimanjaro- Tanzania and other parts of Tanzania

Skills needed to produce, install. maintenance, use:

" Repair and fabrication of the solar dryer requires short training

How to use it:

" <https://youtu.be/PRq2R81cA0E>

How to maintain it:

" <https://youtu.be/PRq2R81cA0E>

Climate effect (if any):

Solar energy which is the input required for drying crops in the dryer is a renewable energy thus no GHG emissions.

Where it is used and how many users are there?

It is used in Kilimanjaro- Tanzania and there are more than 1000 users

Why is it successful?

It is easy to use the technology and it has potential for income generation. Solar drying systems have low operation and maintenance costs. Also, with changing lifestyles and growing preference for ready to cook food items, there is immense potential in this line of business.

If you can make it, a short description, typical problems, materials needed:

Need a qualified technician for repairing.

How to make it (if possible):

N/A

How is it delivered and by whom?

Awareness raising on use of solar drier produces. Packing of produce in different quantities including 1kg for selling

Successful financial model

The initial cost for solar dryer was sorted out through Bank credit. Operational cost are covered from selling of dried solar products

What policies and strategies helped the success?

The leaders of the councillors in Tanzania help us by seminars, education and study tour in a different place in the Region.

More info:

esterina@yahoo.com, +255 755 869146

Sources:

ESFRITA Group

When was the case uploaded?

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*Case from Catalogue of Local Sustainable Solutions
in East Africa. Read more and see partners at
localsolutions.inforse.org*