

# No more Mango Waste, We Conserve the Taste!

## Initial Situation

The «Förderverein Baluo» is a charity organization which is active in The Gambia. They launch projects with the Gambian people and want them to run a business on their own.

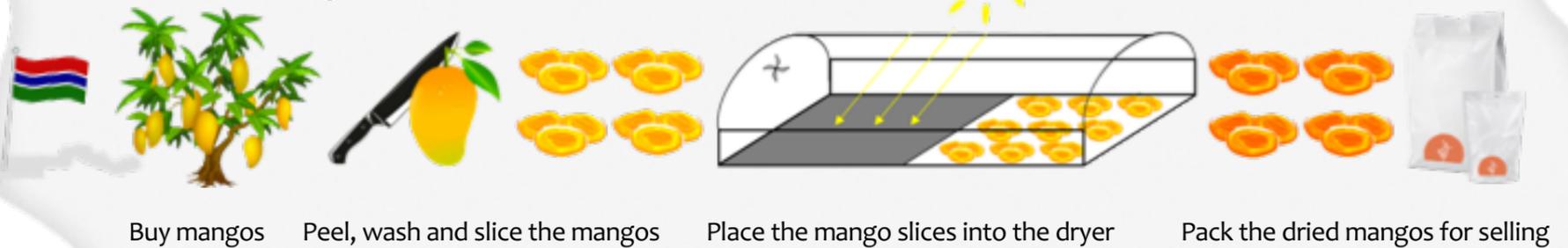
Mangos are a common fruit in The Gambia. The client's idea is to dry mangos and sell them during the rainy season. The client has no experience with the drying of mangos so far.

## Project Goals

The main goal of the project is to evaluate a suitable concept to dry mangos in The Gambia by using the given local resources.

A suitable concept means that the system to dry the mangos should be easy to use, inexpensive, repairable by locals and powered by renewable energy sources. The instable electricity grid should be avoided.

## How to dry mangos



## Recommendation

The project team suggests starting the drying operation with **three dryers** from the Solar Association Tiloo. With this system, they can then evaluate whether there is enough demand for dried fruits at the local market.

A training program about the handling of the system is also supplied by Tiloo. If there is a high demand for the fruits, the project team recommends implementing a more technical system that delivers a larger amount of dried fruits.



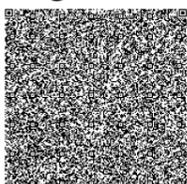
## Indirect Solar Dryer

The best suitable dryer is the indirect solar dryer from the solar association «Tiloo». The most important facts about this dryer are listed below:

-  Available in The Gambia
-  Runs with renewable energy (independent from local electricity grid)
-  Easy usability and maintenance
-  Low priced (7,500 Gambian Dalasi  $\cong$  CHF 150)
-   $\pm$  Approximately 1 kg dried mangos per day



Image sources:



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