

Theme: “Innovative approaches for disseminating post-harvest management technologies and practices for achieving agripreneurship among smallholder farmers”.

S/THEME: « DRYING AGRICULTURAL PRODUCTS WITH THE DJILEMO OVEN »

Auteur : Louis DJILEMO ; Ingénieur Agronome, inventeur du four DJILEMO ,spécialiste en technologie post-récolte ; consultant international ,expert en agriculture tropicale et système après-récolte, chercheur en développement rural et agricole, BP : 257 Douala, Cameroun ;

Tél : +237 699 91 43 33 ;

Site web : <http://www.giccaic.blogspot.com/> ,Email : djilemo@yahoo.fr ,

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PLAN of the presentation

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OBJECTIVES

- Improve the nutritional situation and food security of the population all year round.
- Reduce post harvest losses to a minimum to increase the revenues of the farmers and to improve their livelihood.
- Create more value added within the value chain.

Description

- The « Four DJILEMO » consists of a combustion chamber, and a drying chamber.
- Source of energy needed résidus de récolte, de l'indus: mostly harvest residues, waste form transformation and other sources of bio mass.
- The function bases on the exchange of air flux and the products exposed for drying.,
- It is easy to construct and maintain

Advantages

- More hygienic than drying in the sun
- Also works in rainy season
- Fast drying of a large amount of product
- Low maintenance costs
- Low fuel cost, as residues from cassava or other crops can be used

Materials, labour & costs required

- *Materials*
- Construction : local construction materials.
- Controlling and measurement : thermometer, humidimeter and scale
- Labour : mason, carpenter, welder et and assistants
- Costs: 2500 000 – 4500 000 Francs (app. 5000-9000 \$) depending on size (capacity 200-400kg) and extras (thermometer, fan)

Stade de développement

- **1999** first DJILEMO oven constructed
- **2008**, four Djilemo oven won the price as best technological innovation at the workshop fair organized by (Fond international pour le Développement de l'Agriculture) and partners in, Burkina Faso in June 2008.
- The DJILEMO oven has been constructed in its stationary version in several places of Cameroun: 10 oven are constructed and in regular use.
- And in Ghana : another ten DJILEMO constructed

Methodology

- Participatory appraisal in farmers groups.
- Decision to order a Djilmo oven
- Adaptation of dimensions of oven depending on the capacity of agricultural production.

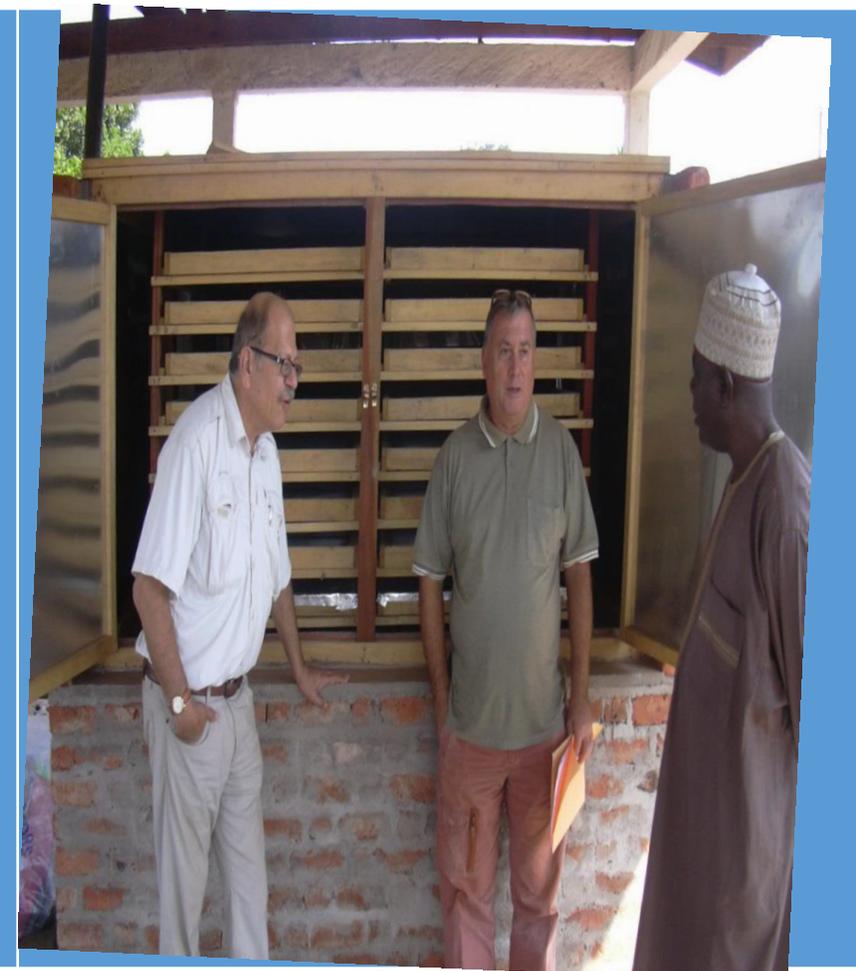
Results



The president of Cameroon **Mr Paul Biya** visits the Djilemo oven in the « comice agropastorale d'ÉBOLOWA » 2011



Visite of Mr ESSIMI MENYE ,ÉBOLOWA 2011



The of Membres the European Union visit DJILEMO oven in Batouri (used for drying chilly peppers) 2013

Resultats



DJILEMO oven in MAMBELE (Yokadouma-Est) For drying de EKOK and other forest products. During a training on the use of the oven. -2015



DJILEMO oven in MINKOA(LOBO-Centre) for drying « cossettes » (flour) of cassava and starch-2008



DJILEMO oven in IRAD- NJOMBE (Mougo- Littoral) for drying plantain 2015

Résultats



DJILEMO oven for drying maize seeds in Bafou (Dschang Ouest)-2015



Chabbage, ginger ,oignons, gombo dried in the DJILEMO oven



DJILEMO oven in BAMA (Est) by the mission of ITC/CCI

Application

Products that can be dried:

- Roots and tubercules
- Legumes
- Cereals
- Spices and others

Discussions

- ***Advantages du Four DJILEMO***

Allows to receive dried products of good hygienic quality all year long.

- ***Competing technologies***

electric et à gas ovens (but more costly for fuels)

- ***Intellectual property***

Patent Number : 14702 / OAPI / from 30st of June 2010 à Yaoundé

- ***Perspectives***

Collaborate for extension on the use of Djilemo ovens and search for industrial, financial and institutional partners.

Conclusion

- Drying of products with the DJILEMO oven allows to better endure the period of drought, and to minimize the effect of climate change.
- The DJILEMO oven allows to reduce the water activity close to zero, which extends the shelf life essentially.
- Allows the farmers to improve their revenues and therefore their livelihoods
- Allows good quality and quantity of food all year round and therefore helps to guarantee the food security.

**We have to eat every day, but we
can't produce food every day.**

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