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## Utilization of Compatible Technology International (CTI) Grinders for Sorghum Flour Production in Central America

Vilma Ruth Calderón  
*INTSORMIL-CENTA*

Kris Duville  
*INTSORMIL-CENTA*

Lily Lopez  
*INTSORMIL-CENTA*

Lloyd Rooney  
*INTSORMIL-CENTA*

Carla Bermudez  
*INTSORMIL-CENTA*

*See next page for additional authors*

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**Authors**

Vilma Ruth Calderón, Kris Duville, Lily Lopez, Lloyd Rooney, Carla Bermudez, Yesenia Chacon, and Elliiana Pinilla



Centro Nacional de Tecnología  
Agropecuaria y Forestal  
[www.centa.gob.sv](http://www.centa.gob.sv)



# “Utilization of Compatible Technology International (CTI) Grinders for Sorghum Flour Production in Central America”

**By:**

Vilma Ruth Calderon  
Kris Duville  
Lily Lopez  
Lloyd Rooney  
Carla Bermudez  
Yesenia Chacon

Laboratorio de Alimentos

January , 2011

# Project Results. Workshops Developed since february 2010

TRAINEES	LOCATION
26	ONG: INTERVIDA, CARITAS, USAID FTF WinRock (2 personas)
35	FARMERS from San Martin Extensión Agency
31	University of El Salvador, Facultad Multidisciplinaria Paracentral.
35	Farmers from Atiquizaya Extensión Agency
34	MENAPAES , National Bakers Association Soyapango group N° 1.
42	MENAPAES, Cojutepeque. Group No. 2
23	MENAPAES,. Aguilares, Guazapa. No 3
25	FUNSALPRODESE, ONG, La Unión.
41	MENAPAES, Chinameca. Group No. 4
39	MENAPAES, Escuela comunidad Distrito Italia, Tonacatepeque y Soyapango . Group No. 5
44	NGO : Arzobispado de El Salvador y MENAPAES
55	ONG:" International Fundation for Children Relief", FIMRC.ORG, comunidad Las Delicias, San Juan Opico Dpto. La Libertad.
total	1062 CAPACITANDOS

# WORKSHOPS



**MENAPAES GRUPO N°1**



**MENAPAES GRUPO N° 2**



**MENAPAES GRUPO N° 3**



**MENAPAES GRUPO N° 4**



**SAN MARTIN  
EXTENTION AGENCY**



**MENAPAES GRUPO N° 5**

# Other Project Activities

- Elliana Pinilla, a WinRock / USAID volunteer visited CENTA in February 2010 to support transference activities and conduct a preliminary Impact Evaluation study in sorghum utilization for small and medium bakeries.



# Agroexpo Fair

- Agroexpo Fair

During the annual Agroexpo Fair in february 2010, CTI grinders and sorghum products were demonstrated to hundreds of interested people. The objective was looking for a grinder distributor and promote sorghum utilization. El Salvador president Mauricio Funes visited the Food Lab stand and received sorghum products as a gift.



# Promotional Speeches

- 6 promotional speeches about sorghum flour production and utilization were given to MENAPAES, by CENTA's Food technicians prior to workshops schedule with the objective to inform and to motivate bakers.





# International Trainees

- 2 Technicians from “Marta Abreu de las Villas University” from Cuba were trained in sorghum Utilization and flour production. The objective of this visit was sharing knowledge and experiences about gluten free product development and flour production in both countries.
- A sorghum grinder was donated to them by CENTA



# World Food Program Visit.

- World Food Program Director Dorte Ellehammer and her technical committee visited CENTA last June to know about sorghum products developed by CENTA's Food Laboratory, specifically cookies and sorghum beverages as substitute of incaparina
- The purpose of their visit was to buy sorghum products from small and medium food industries trained by CENTA and introduce it to the food school program . Now CENTA is making arrangements to start this contribution with WFP.



# FIRMC Nutritional Program

- One of the successfully activities of the CENTA's sorghum project transference program is the collaboration with the Foundation for International Medical Relief of Children .
- This is a non profit organization dedicated to improve pediatric and maternal health through the implementation of sustainable heath improvements program.
- Women's mothers of malnourished child's from this program were trained by CENTA in sorghum utilization for food and there are food with sorghum products.
- Childs are constantly monitored and they gain weight and wealth eating sorghum foods and beverages.



# Progress in the distribution and use of sorghum grinders

- LeAnn Taylor, CTI volunteer brought 7 grinders to El Salvador in February 2010 ( 3 Omega VI and 4 Ewing ), that were distributed as follows :
- 1 Omega VI was bought by a Zamora no - assisted group that prepares ethnic drinks, and was motorized at a local workshop.
- 1 Omega VI was bought by CENTA and was later donated and taken to the University Marta Abreu, Cuba. They will motorize it and use it for demonstrations.
- 1 Omega VI and 4 Ewings were sold to Kris Duville, in order to be able to offer grinders to people interested until a CTI representation and import company can be found. From these one will be used by a women community with support of an FAO agency.
- September 2010. Another was bought by FAO and they made the donation to Las Bromas Women's Association in Atiquizaya.
- MENAPAES got one for their pilot plant in Cojutepeque.

# Progress in the distribution and use of sorghum grinders

- The grinder in use at the FIRMC clinic and “Las Bromas” were motorized on behalf of CENTA in order to facilitate the use of the grinder. It is being used to prepare foods for malnourished children.

Grinder for Zamorano project



Grinder for FIRMC Clinic



# Progress in the production and the use of sorghum flour

- The 4 roller mills installed at Pablo Anliker's industrial plant have been revised and test-run by an Asian technician, and are being used more often. Contacts have been established with the organization of small bakers, MENAPAES, and big bakeries as Pan Rey to provide them sorghum flour and wheat flour, the latter imported from Mexico.
- Pablo has a bakery inside the plant. He is producing sorghum sweet bread and has 18 distributors who sell the bread in the community and surrounding areas.



# MENAPAES FIRST PILOT PLANT

- Cojutepeque Association from MENAPAES is producing 50 qq sorghum flour daily and is distributed in 44 bakeries in the area.
- This is the first of 5 medium pilot plant they are going to establish in different areas of El Salvador
- The project was presented to the technical secretary of the presidency and they are going to promote the activity.



# Final Comments

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- At the moment the wheat flour prices are high, what makes again an opportunity to compete with sorghum as an alternative. Sorghum flour is half of price of wheat flour
- The small grinders are used to process locally produced sorghum into flour for small bakeries or ethnic drinks.
- Nutritional benefits for children and health-conscious people create opportunities to commercialize sorghum while wheat flour prices keep attractive, and are explored and proposed by the Food Laboratory to institutions such as Ministries, Universities and FAO , Food School Programs and and others.
- **TRANSFERENCE ACTIVITIES IN CENTRAL AMERICA AND THE CARIBBEAN. 2011**
- **ADOPTION STUDIES.2011**



# Final Comments

