

Moringa and other highly nutritious plant resources: Strategies, standards and markets for a better impact on nutrition in Africa. Accra, Ghana, November 16-18, 2006

# **Moringa Leaf Farming Systems: Conditions for Profitability and Sustainability**

**The south-east Togo example, by  
the NGO APPEF**

# **APPEF-TOGO**

## **Association for the Promotion of Togo's Forest Tree Species Growers**

- **Working within the Health and Environment sectors**
- **Farming and developing Moringa since 1998**
- **Improving their capacity to process Moringa leaves into powder**

# Farming Systems

- **Monocropping on small plots-system best adapted to this context**
- **Seedlings planted along the perimeter of fields**
- **60 growers**
- **2 ha farmed with 1.2 ha in production**
- **Average plot surface: 300 m per plantation**

# Technical Itinerary

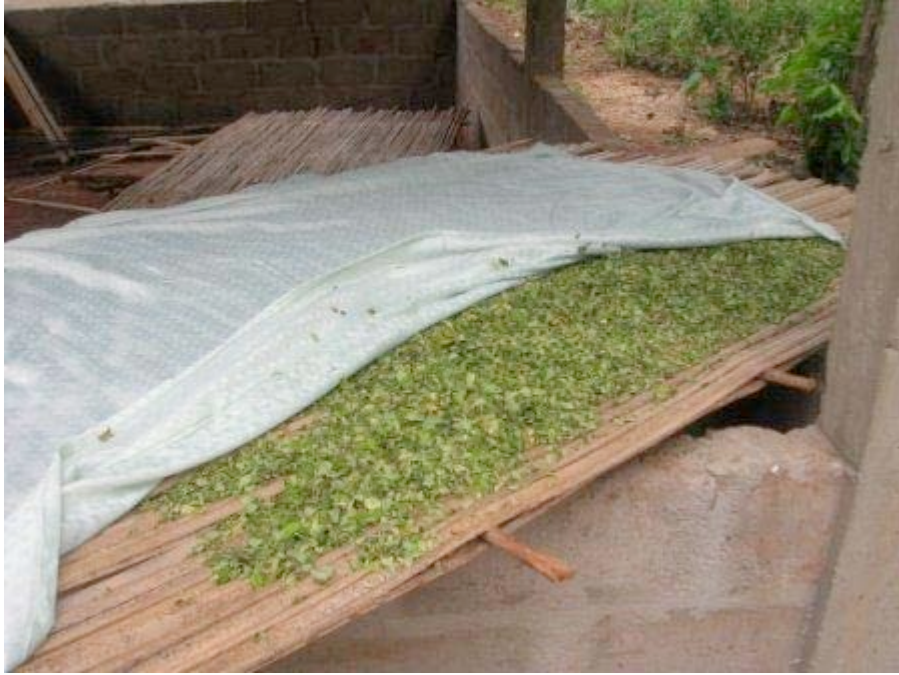
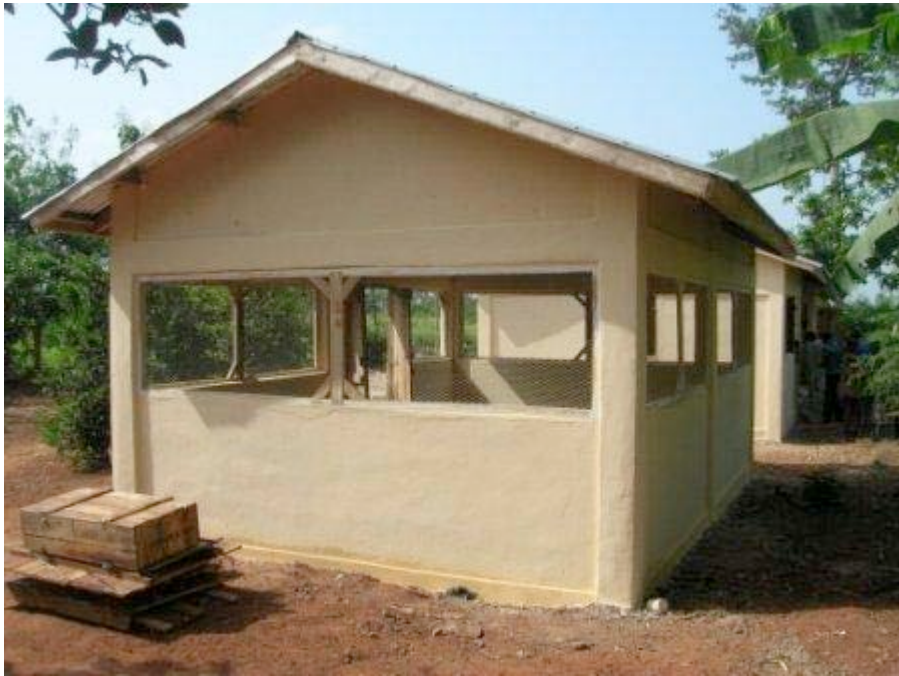
- **Density of 10,000 plants /ha**
- **Planting of seeds or cuttings (diameter > 4 cm)**
- **First harvest at 2 months, then 7 harvests per year**
- **Plants cut back to within 60cm of the ground**
- **3 to 4 weedings a year**

## **Fresh leaf yields**

- **Rainy season : 1120 kg/ha per harvest**
- **Dry season : 690 kg/ha per harvest**
- **Average yield : 6 tons/ha/year**

# Processing

- **Drying in the shade the day of harvest (2 days)**
- **Removal of leafstalks**
- **Second drying (3 to 4 days)**
- **Mill (or mortar) and sifting**
- **Packaging**
  
- **18 to 20 hours of work for 100kg of fresh leaves**
- **13 kg of dry powder for 100 kg of fresh leaves**



# Costs

	in FCFA per 100 kg of fresh leaves	in FCFA per kg of powder
<b>Maintenance</b>	<b>2400</b>	<b>429</b>
<b>Harvest</b>	<b>1900</b>	
<b>Transportation</b>	<b>1300</b>	<b>100</b>
<b>Processing</b>	<b>3900</b>	<b>300</b>
<b>Packaging and sale</b>	<b>variable</b>	<b>variable</b>
	<b>TOTAL</b>	<b>1000 to 1200</b>

# Conclusion & Discussion

- **Costs and yields evolve with new equipment**
- **Reduce the distance to fields by multiplying drying stations**
- **Increase the volumes produced and distributed : importance of communication**
- **Promote the use of other parts of the plant**