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

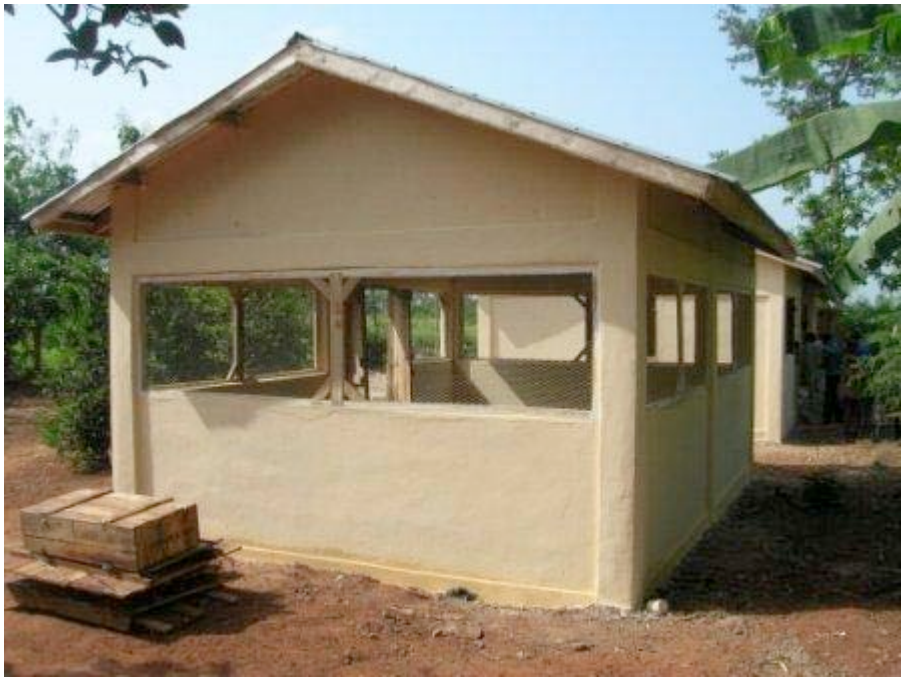
Fresh leaf yields

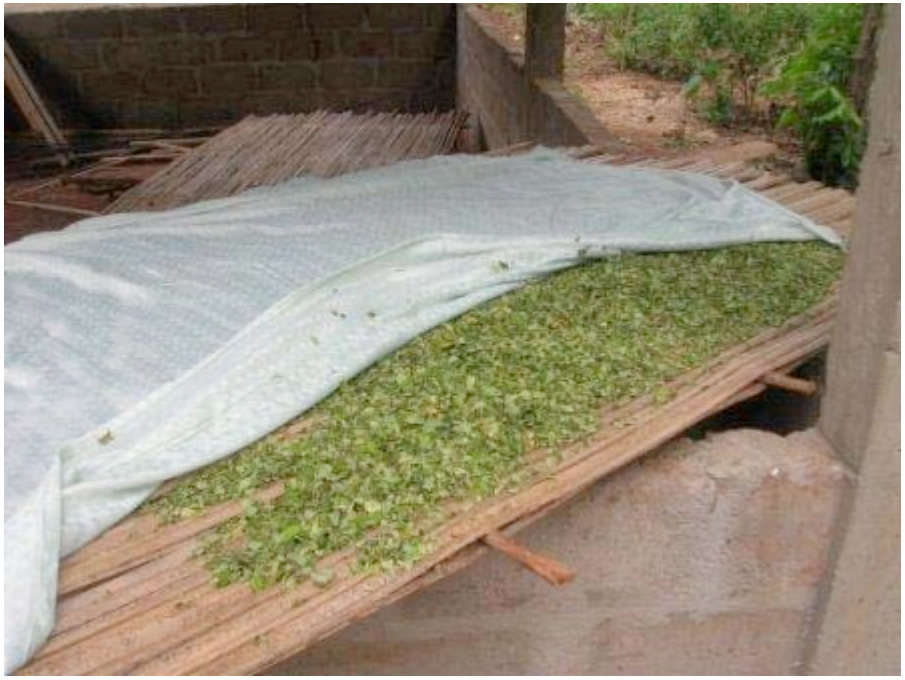
- Rainy season : 1120 kg/ha per harvest
- Dry season : 690 kg/ha per harvest
- Average yield : 6 tons/ha/year

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
Maintenance	2400	429
Harvest	1900	
Transportation	1300	100
Processing	3900	300
Packaging and sale	variable	variable
	TOTAL	1000 to 1200

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 plant8