Maize *Information Sheet*

Section I: Production and marketing

Maize has been cultivated by most farmers in Ghana for home consumption. However, there is a high demand for maize in the processing industry, and Ghana is even importing maize from other countries. Yellow maize is especially in high demand for animal feed processing industry, and high-yielding seeds of both yellow maize and white maize have become locally available in recent years. It is time for Ghanaian farmers to shift from subsistence to commercial production of maize.

Major varieties and their attributes

- **Golden Jubilee:** *Yellow maize, high protein, open pollinated*

- **Obatampa:** *White maize, high protein, open pollinated*

- **Mamaba:** *White maize, high protein, hybrid*
- **Abelehi, Okomasa:** *White maize Shorter production period (3 months)*

Forms of sale

- Fresh

- Dried and shelled

Countries exporting to Ghana

US, Argentina, Ukraine, South Africa

Market calendar

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
High demand											
Low demand											

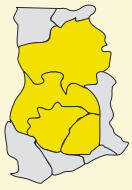
Marketing requirements

- *Low aflatoxins*
- *Well dried (moisture level below 14%)*
- *Few broken kernels*
- *Free from debris*

Climatic and soil requirements

Maize can thrive in almost all climatic conditions in Ghana.

Major production areas



Maize is produced in all regions of Ghana. Larger scale producers can be found in:

- Ashanti region
- Brong Ahafo region
- Eastern region
- Northern region

Seed availability

- Certified seed growers
- Certified seeds from local input dealers

Crop budget

Activity/Item	Cost/ Acre GH¢	Cost/ Acre US$
Land Preparation	122	84.1
Sowing		
Seeds (9kg)	12.6	8.7
Planting	12	8.3
Maintenance		
Fertilizer applications	96	66.2
Insecticide applications	64	44.2
Manual weeding	20	13.8
Harvesting and post-harvest handling		
Harvesting	10	6.9
Transport	20	13.8
Dehusking, shelling& cleaning	28	19.3
Drying	17.5	12.1
Sacks	1	0.7
Bagging labour	6	4.1
Storage	4	2.8
Fixed Input		
Hoe/ Cutlass	2	1.4
Total	**409.1**	**286.28**

Key inputs for high productivity and quality

- Improved seeds
- Recommended fertilizers

Production cycle

3 - 4 months

Production calendar

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Major season											
Minor season											

Estimated yield

- *High input:* **2 tons/acre**
- *Low input:* **1 ton/acre**
- *Break even estimate:* **1 tons/acre**

Historical prices

GH¢ 0.11 - 0.54/ kg

Estimated revenue and profit

- *Revenue:* **GH¢ 1,120**
- *Gross profit:* **GH¢ 420**
- *Gross margin:* **37.5%**

Minimum acreage for viable business

5 - 10 acres

All information valid as of: ***September 2009***

USAID FROM THE AMERICAN PEOPLE

Maize *Information Sheet*

Section II: TIPCEE Intervention

TIPCEE maize intervention has encompassed not only GAP training but also promotion of improved post harvest practices and training on business management skills. TIPCEE has strongly engaged private sector partners at all levels of its intervention. Leader farmers organized their communities and entered into direct business negotiation with market partners. Outgrower schemes were also established, and these farmers have now entered into commercial production of maize.

State of the industry at the start of the project

Opportunities:

- High demand for maize for local market and for industrial processing
- Yellow maize for animal feed imported from other countries, which could be produced in Ghana
- Seeds of high yielding varieties produced locally and becoming easily available in the country

Challenges:

- Farmers producing maize for subsistence without commercial mentality
- Industry poorly organized to source maize locally from a large number of smallholders

TIPCEE intervention

- Introduction of improved varieties and their cultivation protocol through demonstration plots
- Training farmers on GAPs of maize production and post-harvest handling
- Business capacity building of farmers through "Yi-Po-Co-Ma training" *(:Yield - Post harvest - Cost - Marketing)*
- Integration of smallholder farmers into formal industrial maize market chains through the establishment of outgrower schemes
- Promotion of quality standardization through improved post-harvest practices

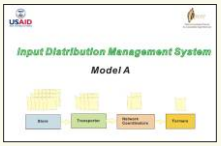
TIPCEE tools

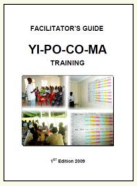
- *"Good Life of Maize"* poster
- Post-harvest tools (shellers, scales and moisture analyzers)

- Laboratory equipment for mycotoxin analysis
- Outgrower contract and database template

- Demonstration sites

- Input distribution system models
- Facilitator's Guide, *"Yi-Po-Co-Ma Training"*
- Handout, *"Yi-Po-Co-Ma Training"*





TIPCEE achievements

- Over 33,000 farmers trained on GAPs
- 3,800 farmers and extension agents trained on "Yi-Po-Co-Ma" business module
- Almost 500 demonstration sites established
- Establishment of 4 outgrower schemes with industry partners
- Partnership with 4 major distributors and processors for standardization of post-harvest management and the establishment of a mycotoxin analysis laboratory at Kwame Nkrumah University of Science and Technology

Lessons learned

- Lack of market information results in over-speculation by farmers.
- Excessive use of pesticides results in high production cost, environmental and health hazards.
- Food security of rural communities is best enhanced by farmers shifting from subsistence farming to commercial production.

Next steps

- Promotion of infrastructure investment for production, assembling, processing, transport and storage
- Financing program to motivate farmers to adopt GAPs and to achieve economies of scale

Collaborating partners

- MOFA
- Private sector partners including maize processors, distributors and researchers

All information valid as of: ***September 2009***