VCAC
Village Commodity Aggregation Centres
Post-harvest solutions for small scale producers

KPMC
Kenya Promotion & Marketing Company (H) Ltd.

COLLECTIVE MAIZE MARKETING BY SHF

KPMC as an agribusiness partner to producers

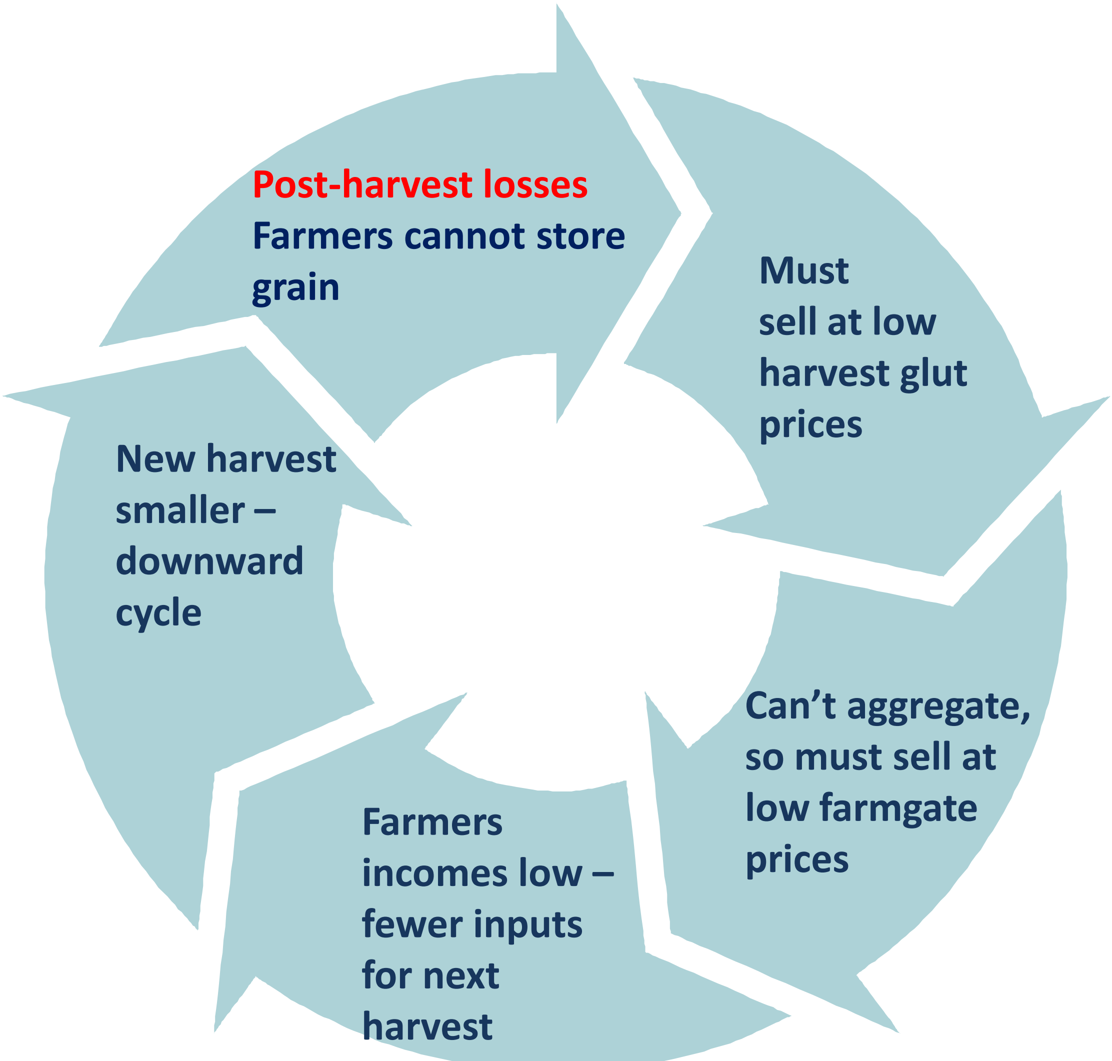
FAO Conference Norfolk, June 2012

SEED Awards 2010 WINNER
UNEP UNDP IUCN

GRAINPRO, INC.™
ORGANIC STORAGE SYSTEMS

USAID
FROM THE AMERICAN PEOPLE
Market Linkages Initiative

Small scale farmers stuck in a poverty cycle created by post-harvest losses




29 17:17
Bedroom storage


Roof top storage
3 14:27

VCAC breaks the poverty cycle with proven technology

Hermetic “cocoon” virtually eliminates post-harvest losses

- Naturally traps CO_2 and decreases oxygen, killing insects and aflatoxins
- Prevents mold by stabilizing ambient moisture
- Preserves grain quality -- moisture & weight constant through storage, allowing accurate forward sales

Technology by GrainPro

- Successfully implemented worldwide, especially in coffee
- Multinational company with global reputation

Cocoons provide local storage
Creates community ownership

Mobile, flexible cocoons encourage community participation

- Avoids delay & cost of transport to regional warehouse, which offers poor storage at high price
- Village-level storage increases trust and safety – farmers share protection

VCAC provides complete solution

VCACs process & test grain before storage

- Sophisticated processing – e.g. threshing, testing - ensures quality & avoids waste
- Consistent monitoring improves buyer certainty, especially against aflatoxin invasion
- Moisture meters allow farmers to precisely dry grain to 13.5%, preferred by millers

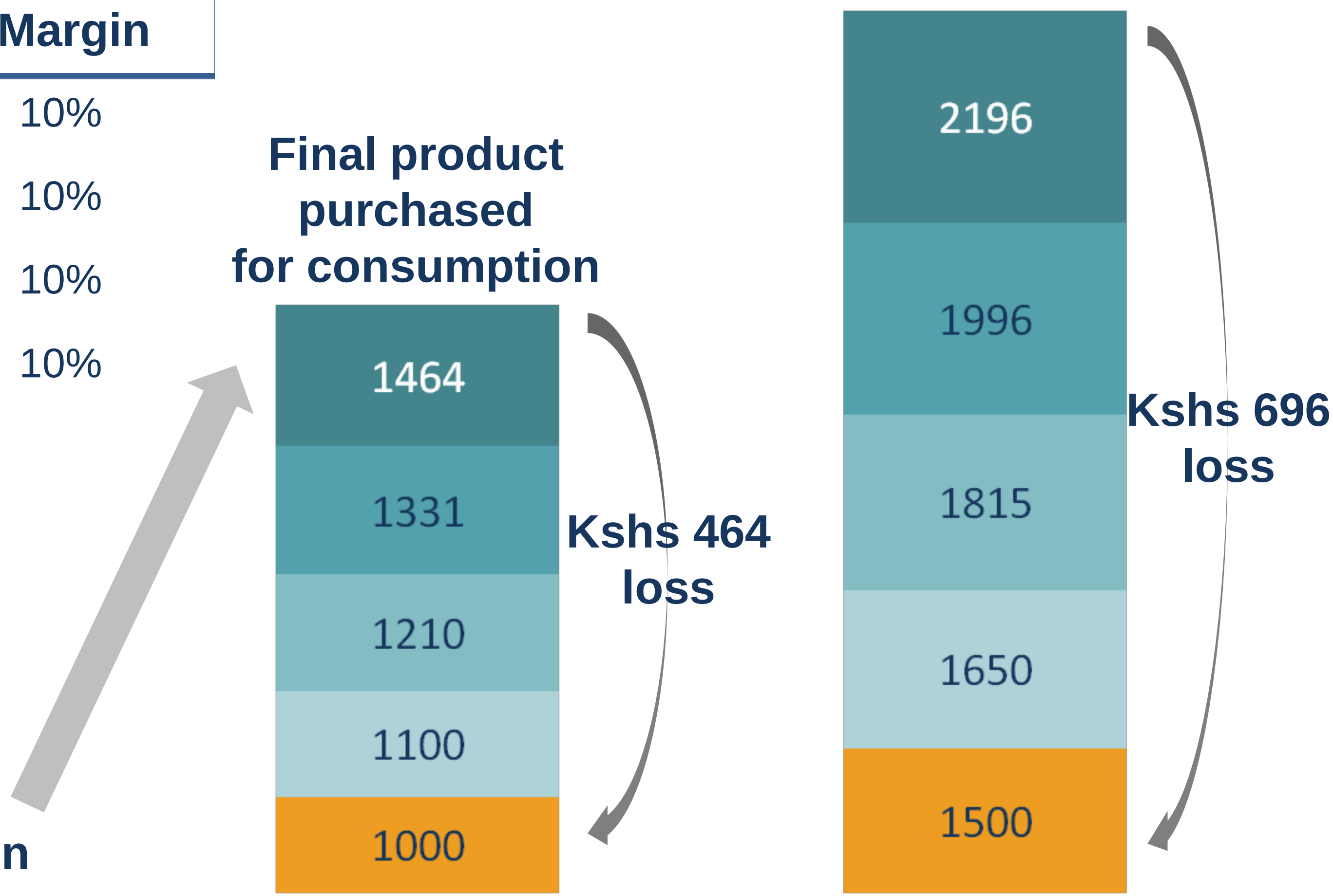
Additional processing improves value capture for small farmers

- Quality processing increases price from end buyer
- Single stop to process and store grain

High prices mean farmers sell early but later….

60% must return & buy food at a higher price

Value Chain	Theoretical Margin
End Buyer	10%
Second Broker	10%
Processor	10%
First Broker	10%
Farmer	



Three ways to increase farmer incomes + increase savings, investments

1 Reduce post-harvest loss

Increase grain sold by individual farmers

- End Buyer
- Second Broker
- Processor
- First Broker
- Farmer

2 Hedge price & build food security

Sell harvested grain later at higher seasonal price

Store food security grain to avoid re-purchase

Increase local food security

3 Link with large buyers

Capture add'l margin by selling closer to end buyer

Improve buyer margins to encourage stable purchasing

Integrate value chain


BEFORE
TODAY

VCAC's start with research to understand the issues, capacity building and then offers the following additional services

Storage
- Food security
- Low-risk storage
- Fee per bag/month

Processing
- Threshing
- Grinding
- Grading
- Other services

Sold to:
- Farmers
- Traders
- Government
- NGOs

Trading
- Buyer linkages 100% increases
- Purchase upfront
- Sell in bulk to large off-takers

Speculation/ Hedging
- Purchase upfront
- Hold as price rises
- Sell to market

Sold to:
- Large buyers
- Brokers
- Government
- NGOs

We accept in-kind payment

OR

cash to serve the most farmers

VCAC targets four major categories of revenue

	Source	Description	Payment	Customers	Status
1	Storage	• Fee for storage charged per bag/month	• Cash	• Farmers, traders, government, NGOs	• Established 3000 storage and handling capacity to aid farmers aggregate
2	Processing	• Fee primarily for threshing, some other services	• Cash	• Farmers, traders, government, NGOs	• ~23,000 bags threshed per season using quality equipment
3	Trading	• Purchase upfront, sell in bulk at higher price to large off-taker	• Cash	• Large purchasers, i.e. millers, government, NGOs	• Contract with key buyers negotiated
4	Hedging	• Purchase upfront, hold until market price improves, sell to market	• Cash	• Large purchasers, brokers	• Accurate timing and speculation knowledge a plus

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Storage provides large post-harvest loss reduction for SHF

Opportunity

Cheap, mobile storage unit can be deployed locally

- Modern warehouses are too expensive and too large for village-level aggregation
- SHFs concerned with storing grain out of sight
- Reduces losses caused by aflatoxins, moisture, etc.

Possible to sell on-demand direct to VCAC

- Farmers see lower price at farm-gate through multiple layers of brokers
- Hard to sell continuously with infrequent broker visits

Challenges

Education difficult with unfamiliar product

- Cocoon appears flimsy, unsecure: must build trust
- Unclear what exact return to farmer will be
- Prevailing belief that aflatoxins and rot are area-endemic and can not be cured

Storage unattractive in high price market

- VCAC must convey value of storage
- Farmers incentivized to sell at farm-gate when prices high

Success factors

Demonstrate benefits

- Pilot program on track
- Support local, national & int'l research on aflatoxin prevalence by geography

Build strong, local partnerships

- Maintain security
- Encourage village ownership and participation

Fund awareness programs externally

- May mean additional grants
- Eventual self-funding once education managed

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Processing opens immediate revenue streams, while bringing additional value-add services directly to villages

Opportunity

Efficient processing requires scale

- Manual threshing slow and labor-intensive while rooftop drying lowers yield
- Processed grain generates immediate improvement in price realization

Commodity can be bulk graded for better pricing

- Accurate weight, quality, and grading metrics immediately available
- Preferred pricing available for consistency & quality

Challenges

High repair & fuel costs have kept margins low

- Profitability has been difficult to track & measure
- Business line is profitable only with very high volumes; pricing must be changed

Farmers are price sensitive

- Anecdotes: may be difficult to increase prices for threshing
- Unclear if possible to make threshing more cost efficient

Success factors

Achieve profitability

- Determine cost efficiencies
- Invest in higher quality machines to reduce repair cost

High-capacity use requires experienced local staff

- On-site maintenance
- Experience operators

Must keep focus on core goal – reduce post-harvest losses

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Trading stabilizes price and could encourage on-lending to SHFs

Opportunity

Crop cycles means high price fluctuation

- Lack of storage encourages immediate farm-gate sales
- Large buyers will pay for supply consistency, and often hedge on price

A quality, high-consistency player could increase market efficiency

- Able to sell when price high
- Off-takers benefit from guaranteed supply
- Benefit from partnering with traditional commodity brokers for storage

Challenges

Requires building extensive market network to off-take

- Very difficult to finance without contract in place
- Unclear what premium MNCs place on consistency
- Additional transport cost would be captured here

Hard to arrange LPO financing with on-lending

- Farmers must be paid upfront, requiring large float
- Significant exposure to commodity price fluctuations
- LPO financing runs 5-10% per month

Success factors

Large working capital facility

- Need ability to pay marginally better than farm gate while delaying sales opportunity
- Unclear financing cycle; excellent terms required

Local partners with exposure to potential off-takers

- Existing relationships with procurement at major firms
- Experience with local distribution & logistics

Demonstrated impact on SHF, despite broker location

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Hedging may be lucrative in future but brings high risk and requires strong capital base and market experience

Opportunity

Profit from arbitrage in inefficient market

- Price fluctuations create opportunity to earn margin on trading commodities
- Historical fluctuations frequent and drastic – high profit potential

Market experience improves likelihood of success

- Understanding regional dynamics gives advantage
- Network of partners makes it easier to sell holdings

Challenges

Upfront capital required

- Must have working capital to purchase commodities upfront

High downside exposure

- Difficult to read major price swings in market
- Could result in losses which affect overall company's health

Success factors

Gain experience in market

- Other services will build experience which can be leveraged for hedging

Build strong, local partnerships

- Provides more information on pricing trends
- Understand exit opportunities for positions

Regions of operations and coverage

Current operations / awareness efforts

Nat’l irrigation scheme region


BEFORE


TODAY

Significant progress made to date: 3 regions covered, 3 business lines initiated, project sustainability proven and financial inclusion is a key priority

Farmer awareness growing – more than 7,400 farmers trained

- Model launched across Kenya Coast , Eastern, Turkan and Nyanza regions: ~800+ MT
- Business reorganized to be more efficient and with reliable staff
- Acheived progress in face of disruptive violence in one region and record high farm-gate prices

Opened profitable new business lines

- Offering agency banking services on behalf of Equity Bank & Co-op Bank in 3 regions
- Leveraging management experience to begin grain value addition & trading
- Entering Western and rift valley with new PPP partnerships
- Secured delivery contracts with key buyers and millers

Major partnerships formed that will drive volumes

- Extended into the region with entry into Tanzania
- Secured credit facilities and negotiating partnerships with financing partners to catalyse and support growth and volumes

Thank you for listening!

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