



Business Models for Smallholder Grain Drying Services

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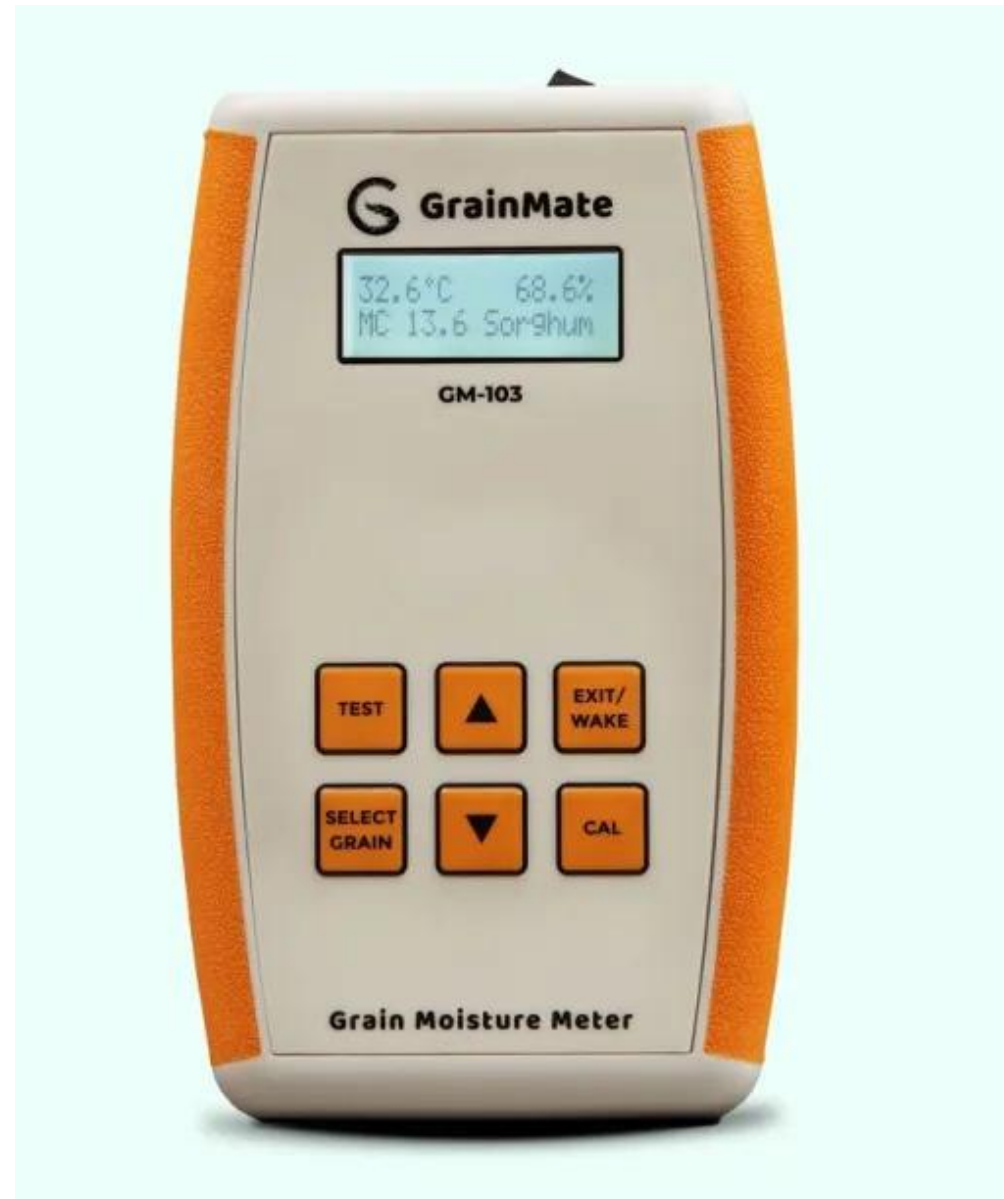


Who We are

- Founded in 2018 to tackle post-harvest losses in Africa
- Pioneered the GrainMate Moisture Meter: Affordable moisture testing for grains
- Launched the ZeroFly Hermetic Bag: Safe, chemical-free storage of grains



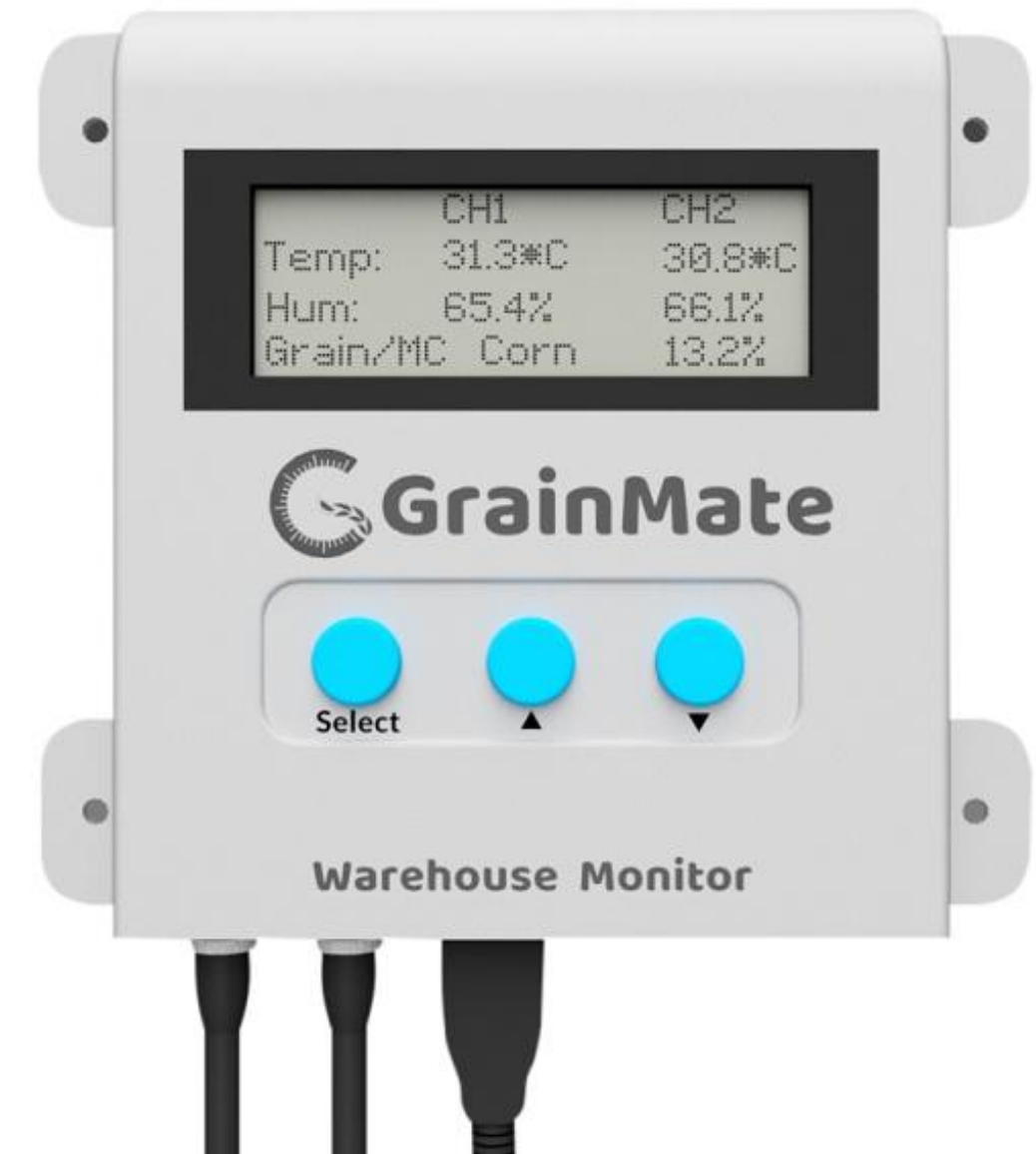
Our Post-harvest Solutions



**GrainMate Moisture
Meter**



ZeroFly Hermetic Bag



**GrainMate Warehouse
Monitor**



Our Impact

- 20,000+ users across Ghana, Nigeria, Kenya, Malawi, and beyond
- Collaborations with WFP, USAID, GIZ, and other key partners
- Supporting smallholders with affordable, scalable post-harvest tools



Listening to Farmers

- Farmers asked: “Can you help us dry and thresh too?”
- We began offering threshing services
- Soon added grain drying based on farmer demand

The Status Quo in Drying

- Most smallholders sun-dry on tarps, roadsides, or bare ground
- Why?
 - It's cheap: the sun is free
 - Lack of affordable, scalable drying alternatives



Our Drying Solutions



**Flatbed Dryer - 5
ton**



**Recirculating dryer - 3
ton**

Why These Designs?

- Appropriate capacity for smallholder volumes
- Cost-effective to build and maintain
- No mixing of grain across farmers
- Simplifies local repair and reduces downtime





Other Local Innovations

- Raised-bed sun drying platforms
- Simple, scalable, and locally manufactured



Business Model in Action

- \$3 per 100kg bag dried
- Flexible payment models:
 - Cash upfront
 - Grain-for-service (barter model)



Which people will use grain drying technologies?

- **Smallholder farmers:** Need to dry their wet grain in rainy season
- **Poultry farmers:** need dry grain for their birds
- **Aggregators:** Grains will get rejected if wet.

Dryer grain = lower
aflatoxin



Exploring China-Africa Synergies

- Potential Chinese drying solutions must be:
 - <10 ton capacity
 - Low maintenance and easy to operate
 - Fast ROI (repay investment quickly)
 - Affordable to run
 - Portable



Closing Thoughts

- With the right technology and business model, smallholder farmers can dry better, lose less, and earn more.