Demand and Supply Chains for a Novel Food Commodity: Growing the Allanblackia Market

Tony Simons (ICRAF) and Rob Diks/Jeroen Oostenenek (Unilever)
Growing the Allanblackia Market

1. The Novel Opportunity

2. The Challenges

3. The Innovation
   (Science, Partnership and Delivery)

4. What has been learned?
1. The Novel Opportunity

- A new solid food oil (fat)
- Unique oil profile
- Used locally for >100 years
- Never been cultivated, only in wild
- Only found in Africa, but declining
- Diversification and Intensification
- Complement existing supply chains
- Global demand potential
Allanblackia Seed Oil

- About 55% is stearine
- Contains 3 triglycerides:
  - SOS 70%
  - SOO 23%
  - OOO 4%
  where s = stearic and o = oleic
- AB oil can not be mimicked by mixing other oils and fats
2. The Challenges
Biological
- Separate male and female trees
- Irregular fruiting each year
- Takes 12-15 years to fruit
- Takes 12-24 months for seed germination (<5% germination)
- Large tree (30-40m)

Cultivation
- Only grown in wild so far
- No farmer experiences
- No horticultural management knowledge

Social and Logistical
- Local communities uncertain of its value
- Need to avoid dominance by a few, and inequity
- Uncertain storage and spoilage issues
- Avoid village level crushing and contamination
- Move all wild harvest to cultivation supply chains
- No food grade clearance in Europe before partnership
Fruit characterization and germination experiments
Mobilising the communities
Germplasm collections

**Plus trees**
- 150 trees in Ghana
- 117 trees in Cameroon
- 120 trees in Tanzania

500 fruit on one tree in Amani
Up to 4.5 kg per fruit
Allanblackia Propagation Protocol
Fruiting variation for selected 7-year old female trees at Subri, Ghana
Village nurseries
Rural Resource Centres

- Source of Knowledge
- Skills training
- Demonstrations (nursery, field, mother block)
- Registration of collectors, buyers, nurseries, producers
- Germplasm source
- Materials (bags, chemicals, equipment)
- Venue for partners to come together
1 Rural Resource Centre serves 10-30 satellite nurseries
1 Satellite nursery serves 20-50 farmers
1 farmer growing 10-100 trees
1 Rural Resource Centre for each 200-1500 farmers (av. 800)
1 RRC leads to 2000 – 150,000 (av. 40,000)
First time fruiting of a 6-year old tree, producing 80 fruits
Supply chain and market development for Allanblackia nuts in Tanzania

- Men and women involved in wild collection, processing, and sale of nuts
- 37 buying centers in operation
- Oil mill at Tanga for oil extraction
- Oil export to International market
Allanblackia margarine launched in Sept 2014

NEW ingredient list:
vegetable oil (sunflower, allanblackia seed *, palm, linseed, rapeseed) (79%), water, BUTTERMILK (0.5%), salt (0.9%), lactic acid, natural flavouring, vitamin A and D

* Allanblackia seedoil comes from trees – named after botanist Allan Black – they produce large fruit pods with seeds that are naturally rich in oil and which is a valuable natural ingredient for heart healthy products.
Success Factors

Strong market demand for unique product
Private Sector pre-financed
Long-term perspective of Unilever
Early returns for small-holders
High trust built (no NDAs)
Knowledge intensive (delays free-riders)
Pre-competitive enterprise eventually
Strong buy-in from national partners
Strong scrutiny from CBOs, NGOs, IARCs
Evolution from research to commercial funding
4. Lessons Learned

False assumptions on wild harvest
All eggs in one basket, relying on germination
Researchers love to research – keep the impact focus
Ideal seedling
4 leaf nodes, > 20cm, no bent root, good root system
No mycorhizae problem, no fungal leaf spot

Keep messages simple for NGOs
Show by example, with demonstration nurseries and farms early on.

Healthy seedlings at Kwezitu, Tanzania
Involvement of local Forest officers is important
FARMER'S
ALLANBLACKIA
TREE PLANTING
LOGBOOK

KUMBUKUMBU ZA UOTESHAJI
WA MITI YA MISAMBU
KITINI CHA MKULIMA
### Private Sector Needs

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