

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



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# Growing the Allanblackia Market

1. The Novel Opportunity
2. The Challenges
3. The Innovation  
(Science, Partnership and Delivery)
4. What has been learned?



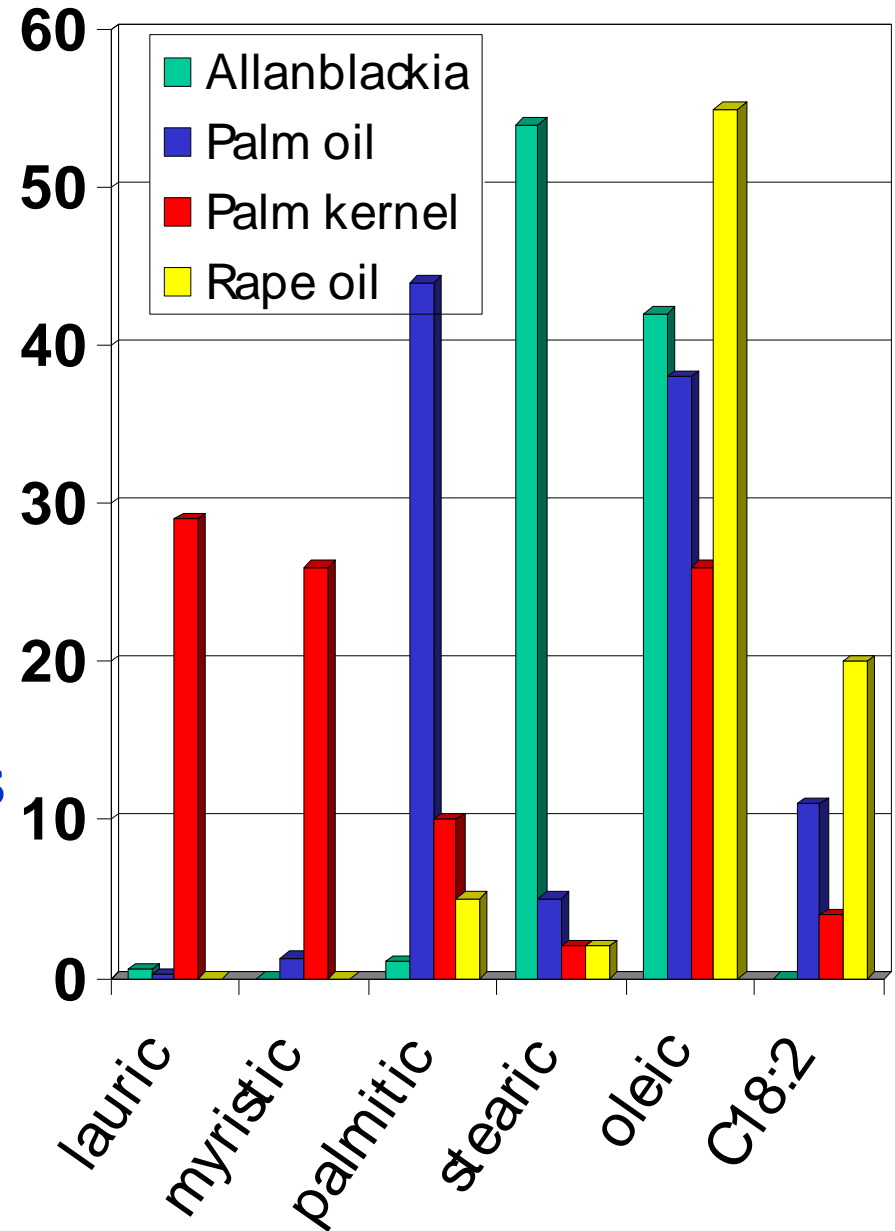
# 1. The Novel Opportunity



- 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



**State of world's research**

**January 2004**

## **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 Ghana

117 trees in Cameroon

120 trees in Tanzania

500 fruit on one tree in Amani

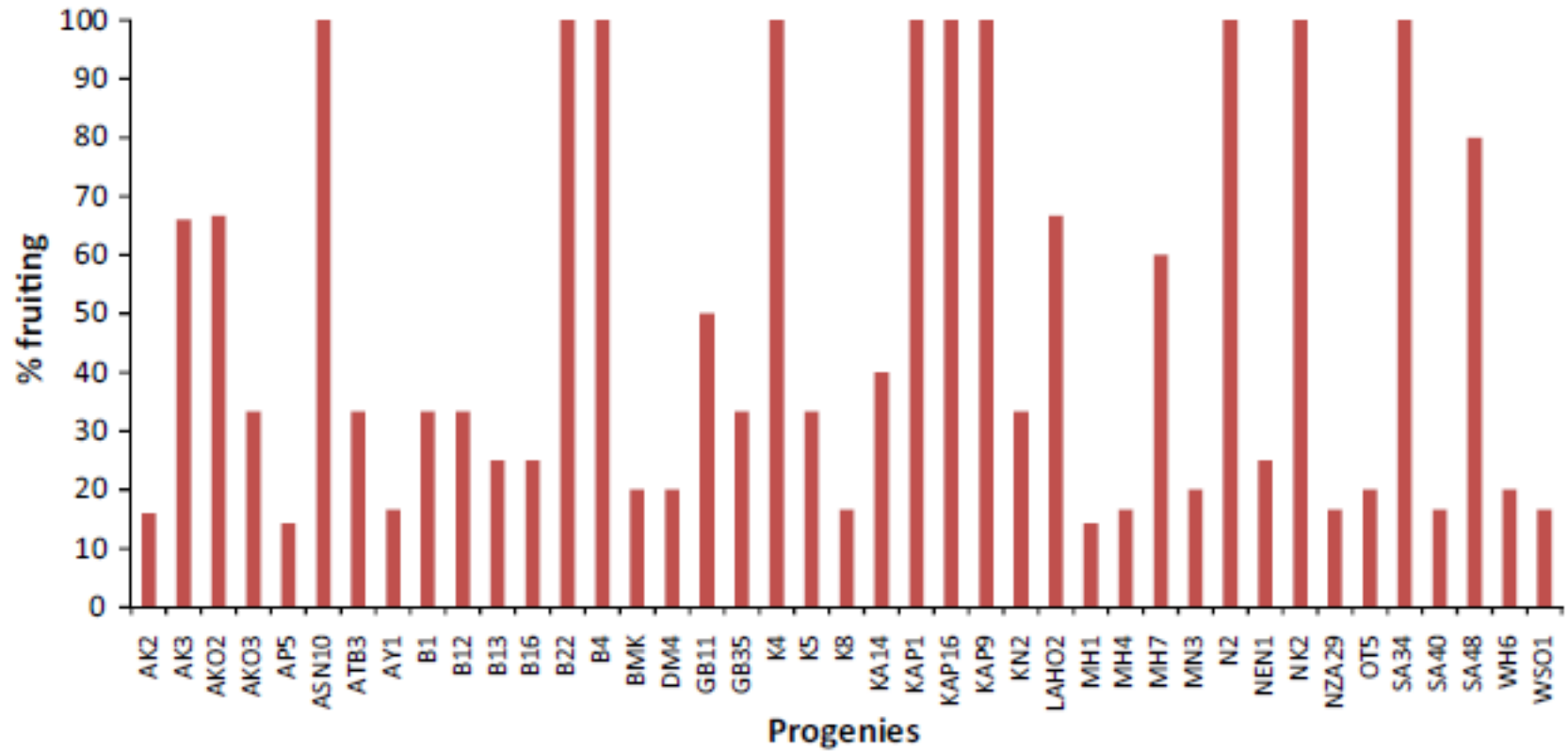
Up to 4.5 kg per fruit



# Allanblackia Propagation Protocol



# Fruiting variation for selected 7-year old female trees at Subri, Ghana



# Village nurseries

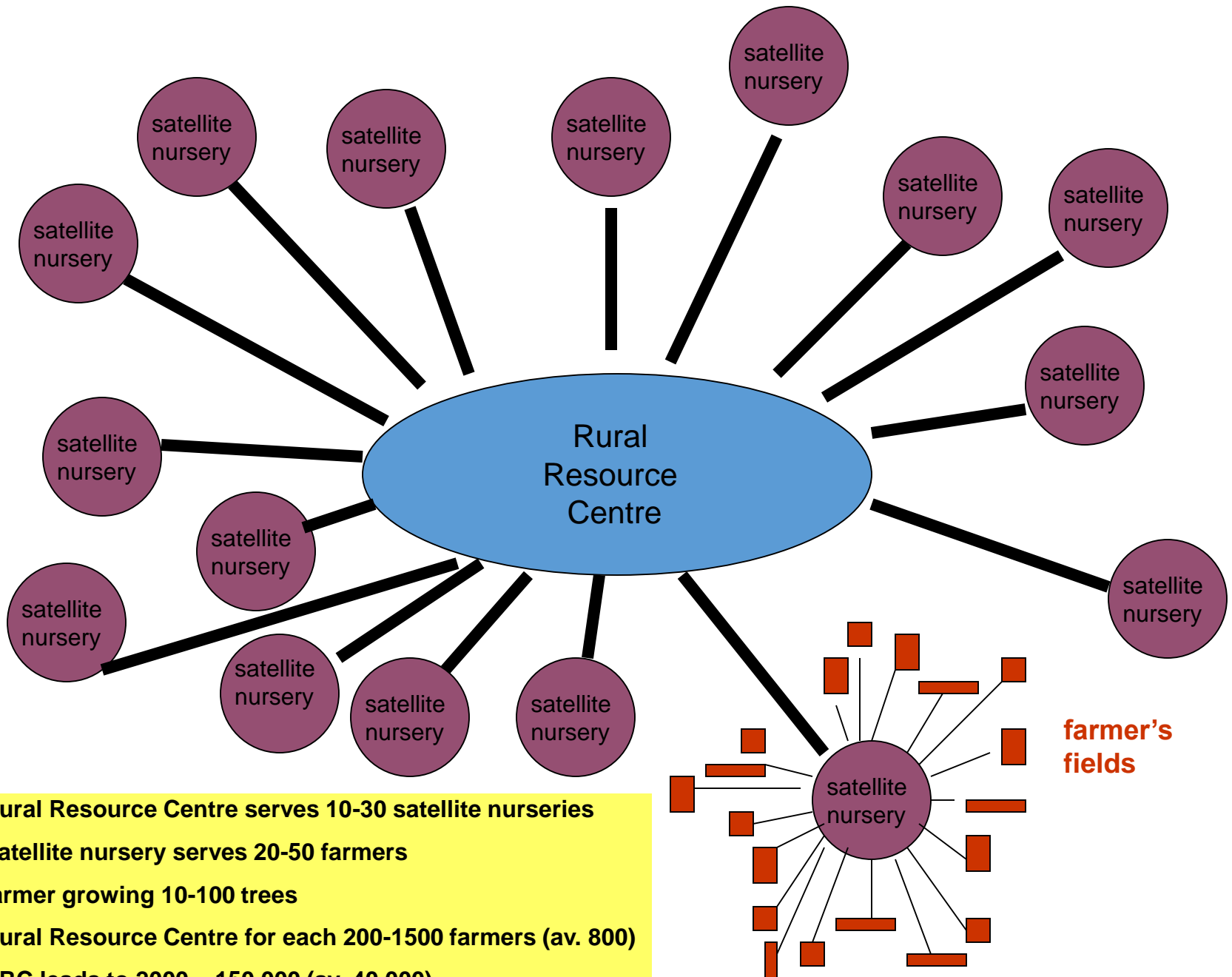




Rural Resource Centre – New Edubiase)

# 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 & sale of nuts

- 37 buying centres in operation

- men & women involved in wild collection



Oil export to International market

Oil mill at Tanga for oil extraction



# 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

# Allanblackia (Sonkyi)

Sonkyi  
Kandohwe  
No Akaka  
No Otte



Every tree is important.  
Do not cut them down.



Pick only red fruits.  
Cut pods under trees.



Only adults can collect and  
sort pods.



Dry in the Sun. Do not roast.



Store in a clean, dry environment.

Uttara Ghana Ltd. in Partnership with SNV/Sustainable Development Organisation,  
Institute of Coastal Affairs (ICA) and Friends of the Ntase (FON)

## 4. Lessons Learned



False assumptions on wild harvest



**All eggs in one basket, relying on germination**

**Researchers love to research – keep the impact focus**



**Keep messages simple for NGOs**



**Ideal seedling**

4 leaf nodes, > 20cm, no bent root, good root system

No mycorrhizae problem, no fungal leaf spot





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

		Research Institution Needs					
		A. Awareness of business orientation/effic (seek to replicate)	B. Funds through Public Private Partnership	C. Funds direct from private sector	D. Understand market demand side priorities/opportunities	E. Greater impact and scaling up	F. Increased visibility/communication of our work
Private Sector Needs	1. Identify/manage supply chain risks						
	2. Technical inputs to initiatives, and instrumentation						
	3. Ease of operation in countries, set up business hubs/incubators						
	4. Investment validation, pulling in other finance						
	5. Policy change, advocacy						
	6. Credibility by associating with us						
	7. Internal review/audit of ventures						
	8. Contract research for deliverables						
	9. Retained advisers for rapid response						
	10. Justify to their staff need for changes						
	11. Germplasm access, multiplication						
	12. Interfacing/convening and aligning role						
	13. Training Programmes						

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