

Business Case: Dedicated Wholesale F&V Benin



Background & Rationale

- Develop direct links between farmers and buyers
- Improve quality of vegetables (food safety, physical quality)
- Reduce postharvest losses
- Service delivery for buyers
- Examples from Ghana
- Focus on wholesale (B2B) <u>not</u> retail (B2C)







Technical solution

- Simple storage with two reefer containers (modelled after Farmer's Market in Ghana)
- Reefer containers at different temperatures:
 - one at 1-2 °C for potato, carrot, onion and cabbages
 - one at 10°C for tomato, bell pepper,
 chilies, beans, oranges and melons
- Sufficient room for washing, grading and packaging

		12 meter	,	
	2.5 meter	Packaging material and crates	2.5 meter	
12 meter	Reefer 1	Grading, processing and packing place	Reefer 2	12 meter
	2.5 meter	Pre-washing	2.5 meter	





Competitors

- Interviewed 5 'semi-grossistes', on purchasing and sales prices
- Semi-grossistes source from the main wet markets and sell to hotels, restaurants and retailers
- Price data was gathered from them and used for business case modelling
- The semi-grossistes were also interviewed about their crop losses





Potential clients

- Listed 60+ possible buyers, comprised of restaurants, hotels and supermarkets
- Selected 15 for in-depth interview on F&V demand, preferences and current suppliers
- Most buyers are currently sourcing from local markets
- F&V characteristics that are most important:
 - Physical quality
 - Taste
 - Freshness
- Food safety and packaging were deemed less important
- Advantages of a dedicated wholesale centre: consistent supply & quality, and invoices



Selection of crops

- Five crops were selected for business case modelling
- These five crops represent the largest volumes demanded by the potential buyers: onion, potato, tomato, cucumber and carrot
- They serve as a proxy for all fruits and vegetables for the dedicated wholesale store
- Expected turnover of wholesaler is 16 tons of F&V per week
- Two reefer containers with different temperatures to ensure longer shelf life

Crop	Average margin	Average losses	% kept in store	Storage °C
Onion	12%	20%	20%	1-2
Potato	20%	15%	30%	1-2
Tomato	14%	10%	30%	10
Cucumber	27%	20%	10%	10
Carrot	11%	10%	10%	10



Investment needed

Land purchase (700 m²)
 EUR 32,079

Land preparations
 EUR 1,352

Groundworks and foundation EUR 9,560

Steel structure EUR 7,330

Installation works
 EUR 8,661

Roofing
 EUR 22,287

2 Reefer containers
 EUR 31,162

Engineering EUR 2,291

Office building EUR 13,750

2 Cold trucks
 EUR 48,881

• Total EUR 192,230

Total XOF XOF 126,094,614





Operational Expenses

Labour Costs

EUR 29,329

- General Manager
- Accountant
- Store Manager
- Driver
- Guards

• Fuel costs EUR 7,500

• Energy costs EUR 1,785

Marketing costs
 EUR 2,000

Other Operational Expenses EUR 5,000





Assumptions

Location Abomey-Calavi

Supply Constant year-round

Yearly inflation rate

Annual salary increment 3%

Effective capacity 40%

Extra margin for service 5%

Unsellable vegetables
 8%

Energy costs 125 XOF/kWh

Daily energy consumption 44 kWh





Financial model

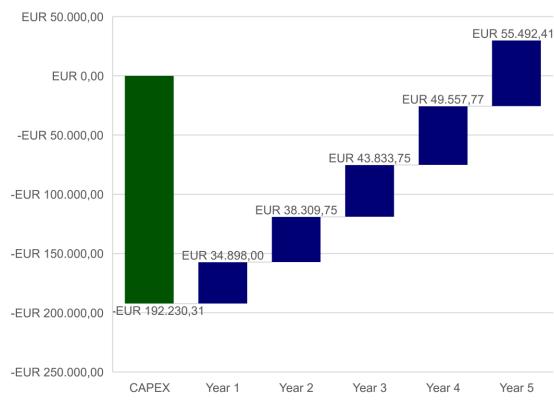
- Based on the assumptions,
 the payback period is 4,5 years
- The internal rate of return in a five year period is 5%

Sensitivity analysis

- Big drivers of the business case are
 - Effective space: 40%
 - Volume unsellable: 8%
 - Service margin: 5%



CAPEX and P&L



	Baseline	Capacity 35%	Capacity 45%	Margin 2,5%	Margin 7,5%	Unsellable 5%	Unsellable 10%
Capacity	40%	30%	45%	40%	40%	40%	40%
Margin	5%	5%	5%	2,5%	7,5%	5%	5%
Unsellable	7,5%	7,5%	7,5%	7,5%	7,5%	5%	10%
IRR	5%	-7%	15%	-13%	19%	21%	-16%

Companies that showed interest

- Based on the two webinars and subsequent communication, the following companies showed interest:
 - Agrikoo
 - Holland Green Tech



Possible financing mechanisms

- The following financial institutions have shown interest to invest in the business cases:
 - Ecobank
 - Banque d'Investissement et de Développement de la CEDEAO (BIDC)
 - Fonds Arabo-Africain d'Investissement
 - FRAGG Investment Management Limited
 - Agri-Business Capital (ABC) Fund
- Conditions:
 - Interested companies need to have sound track record of minimum three years
 - Interest rates of 5-8% per year with one year moratorium are possible
 - Companies will need to provide evidence of collateral / assets



