

Training Manual: The Basics of Financing Agriculture

Module 1.3 | Basics of Value Chain Financing

Acknowledgement

The Agriculture Finance Training Manual is part of AgriFin's Agriculture Finance Training Tools. The Manual was developed by [IPC](#) - Internationale Projekt Consult GmbH as part of AgriFin's technical advisory project for Cameroon Cooperative Credit Union League ([CamCCUL](#)).

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Session Overview

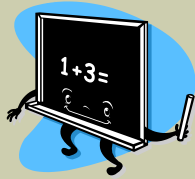
LEARNING OBJECTIVE	Agriculture Loan Officers (ALOs) must understand local agricultural value chains to cater to their client's needs. Value chain financing allows an in-depth understanding of the financial needs of all stakeholders in agriculture.
SCOPE	By the end of this presentation, the session will provide: <ul style="list-style-type: none">• Key constraints in the agricultural value chain that lead to financing needs• Scope, components, and stakeholders of the agricultural value chain• Defining characteristics of farms, including scale of operations, level of mechanizations, commodities produced, and land ownership• Cases of value chains for major commodities grown in the North Western Region of Cameroon
TARGET	Agriculture loan officers, trainers, agriculture experts with limited financial analysis training, and other professionals interested in agriculture financing
DURATION	2 hours



Content

1. Constraints in Supply and Demand
2. Agricultural Value Chain
3. Partners in the Agricultural Value Chain
4. Farm classification and profiling
5. Major AVCs in NWR, Cameroon
6. Maize value chain: NWR, Cameroon
 - i. Cultivation
 - ii. Preservation
 - iii. Processing
 - iv. Distribution
7. Maize value chain: Market trends and flow

1. Constraints in Supply and Demand



What do you think are the major constraints in providing credit to farmers? Write them down and compare with the list below (and let us know which ones we missed out!)



1. Constraints in Supply and Demand (contd.)

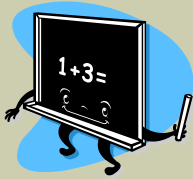
Main reasons why banks/MFIs avoid agriculture financing:

- High delivery costs, poor access to rural farmers
- Unprofitable farming practices
 - Low-tech farming, fragmented plots, inadequate irrigation facilities, monopolized inputs pricing, state-controlled harvest markets, poor road infrastructure, inadequate storage and transport services, no testing services
- Lack of banking infrastructure
 - Analyzing farming household is complex (mixed activities, unknown costs)
 - Lack of financial instruments tailored to agriculture specificities
 - Treatment of rural SMEs as large business houses
 - Poor personal identification system, no loan registration office

1a. Constraints in Supply and Demand

- **Collateral**
 - Collateral is not acceptable, not liquid, expensive to register or has a complicated procedure of recovery → uncollateralized lending → difficult/impossible recovery
- **Risk of crop/livestock disease**
- **Exogenous risks**
 - Government intervention or production and price risk are some unpredictable factors that can have a drastic impact on profitability
- **Weak collaboration among farmers**
 - Joining forces allows farmers to get better and cheaper inputs, to sell production more easily, etc. Agro processors and agro traders also prefer to work with farmer groups instead of individual farmers. For an MFI/bank, it is also advantageous because the group eliminates the weakest elements. But, collaboration among farmers is not easy! Producer cooperatives and marketing associations can easily collapse due to lack of solidarity, poor governance and conflict of interest.

2. Agricultural Value Chain



What is an Agricultural Value Chain (AVC)?

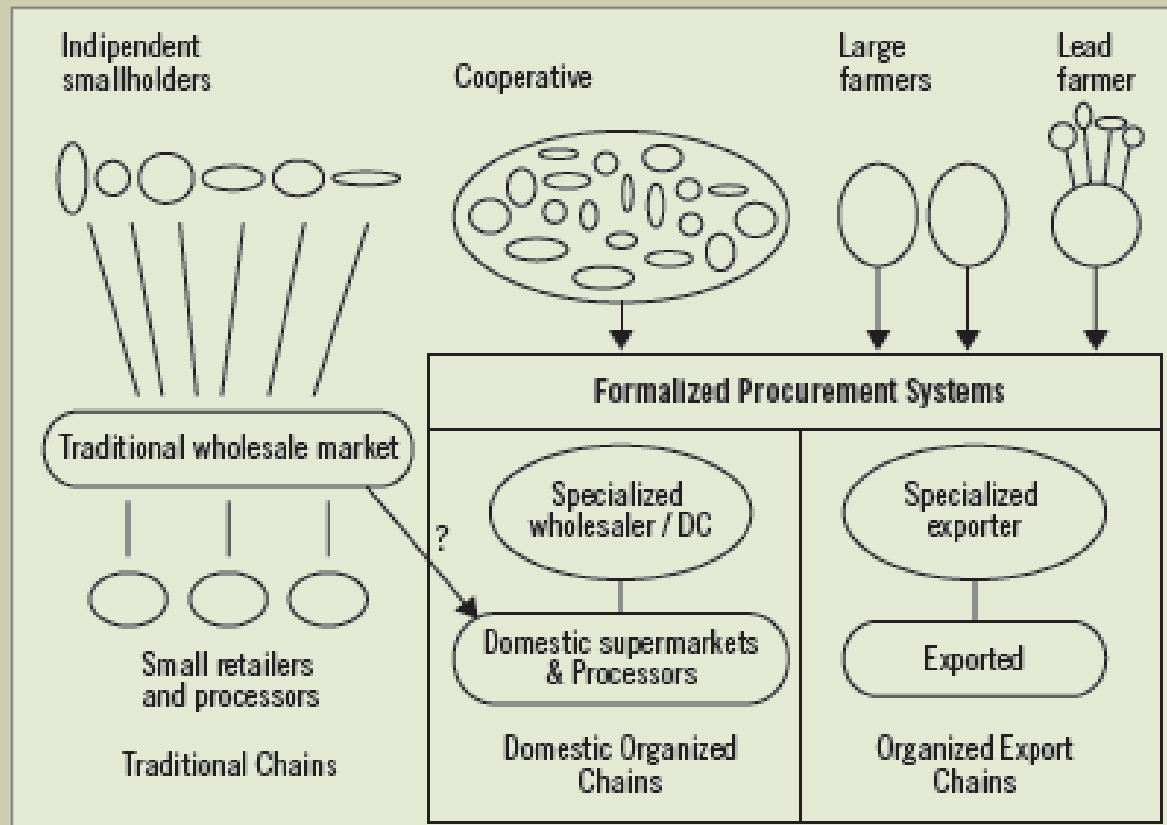
A **value chain** in agriculture identifies the set of actors and activities that bring a basic agricultural product from production in the field to the end consumer, where at each stage value is added to the product. A value chain can be a vertical linkage or a network between various independent business organizations and can involve processing, packaging, storage, transport and distribution. The terms “value chain” and “supply chain” are often used interchangeably.

Traditional agricultural value chains are generally governed through spot market transactions involving a large number of small retailers and producers.

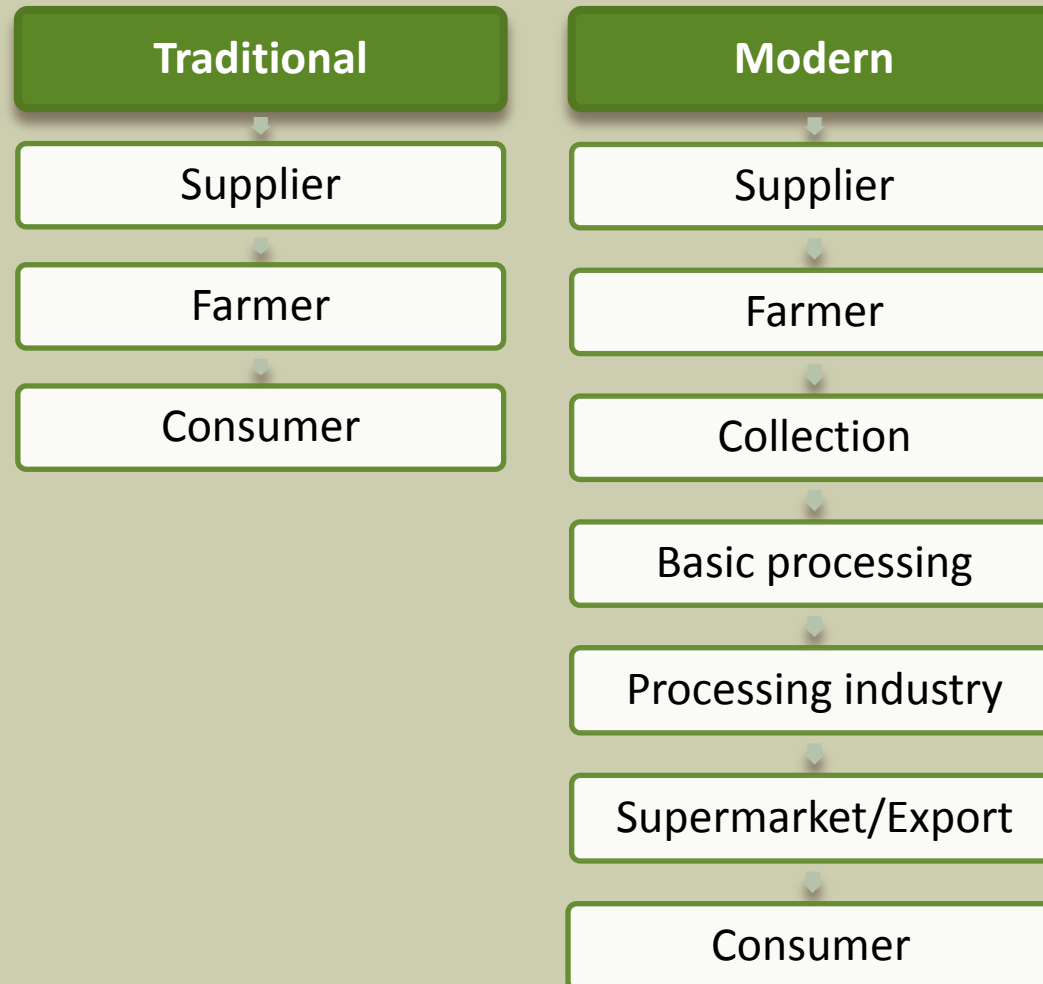
Modern value chains are characterized by vertical coordination, consolidation of the supply base, agro-industrial processing and use of standards throughout the chain.

2a. Agricultural Value Chain - Diagram

Traditional / Modern value chains in food systems



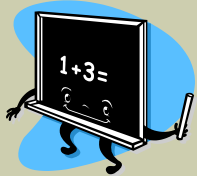
2b. Agricultural Value Chain - Schema



3. Partners in the Agricultural Value Chain

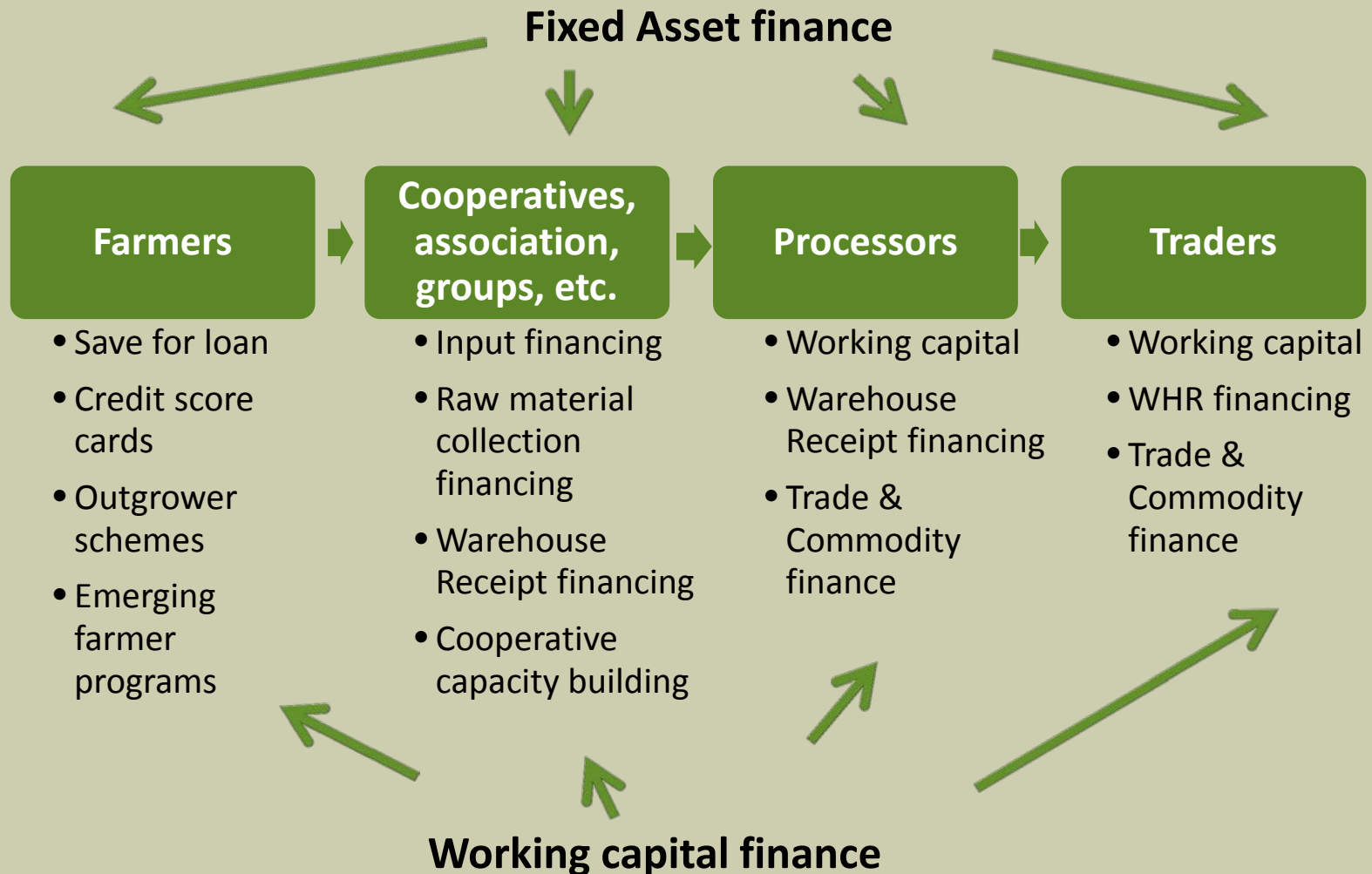
VC Partner	Role in the Value Chain
Input supplier	Provide seeds, fertilisers, chemicals, fuels, equipment, sometimes technical knowledge
Day workers	Provide seasonal labour
Farmers	Grow crops and raise animals. May take part in some postharvest processing and marketing
Farmers' organisations	Bulking inputs and/or farmer outputs to gain economies of scale and better prices. Advocacy, access to technology. Working capital to buy farm inputs for distribution to farmers
Rural traders Collection centres	Buy agricultural produce and bulk-sell it. Sometimes testing and quality certification
Processors	Transform the product into a marketable commodity or consumer product
Distributors, wholesalers	Sell to local retailers, supermarkets
Exporters, importers	Sell to international buyers (commodities or processed products)
Retailers	Sell to consumers
Consumers	End users

3. Partners in the Agricultural Value Chain (contd.)



What do you think are the financing requirements of each of these value chain partners? (Answers at the end)

3a. Partners in the Agricultural Value Chain



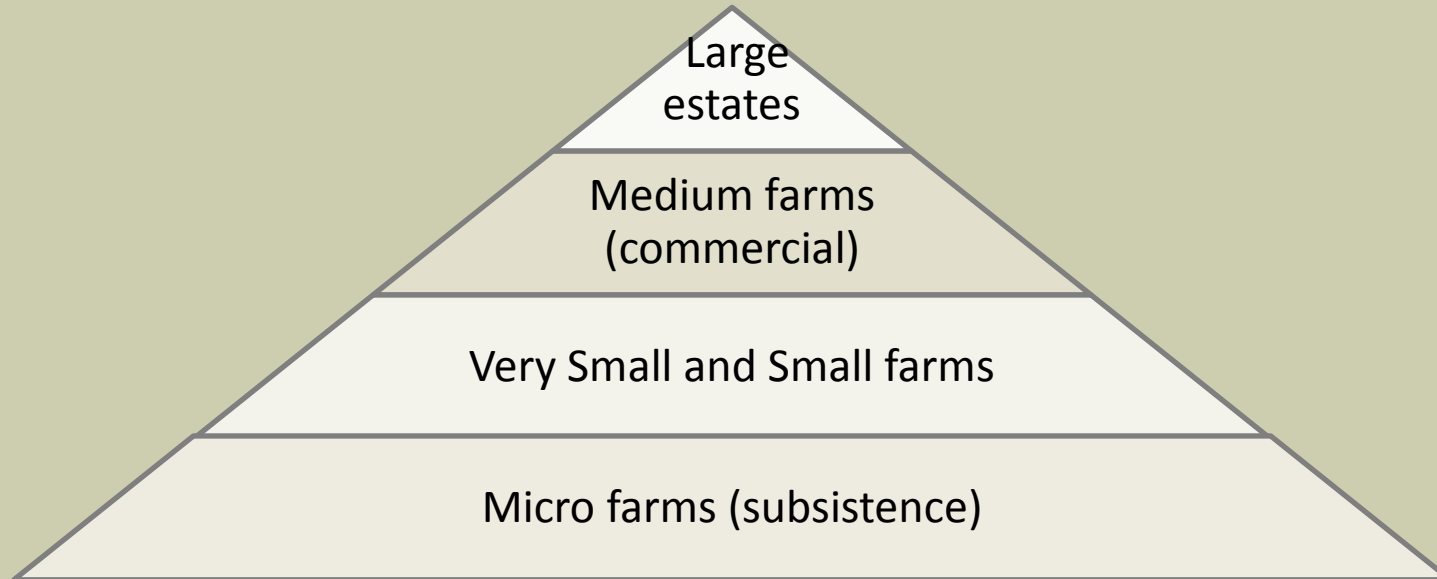
3a. Partners in the Agricultural Value Chain (contd.)



If an ALO can trace the value chain of a commodity, she can expand her portfolio by also financing its upstream and downstream partners

4. Farm classification and profiling

Different categories of farms:



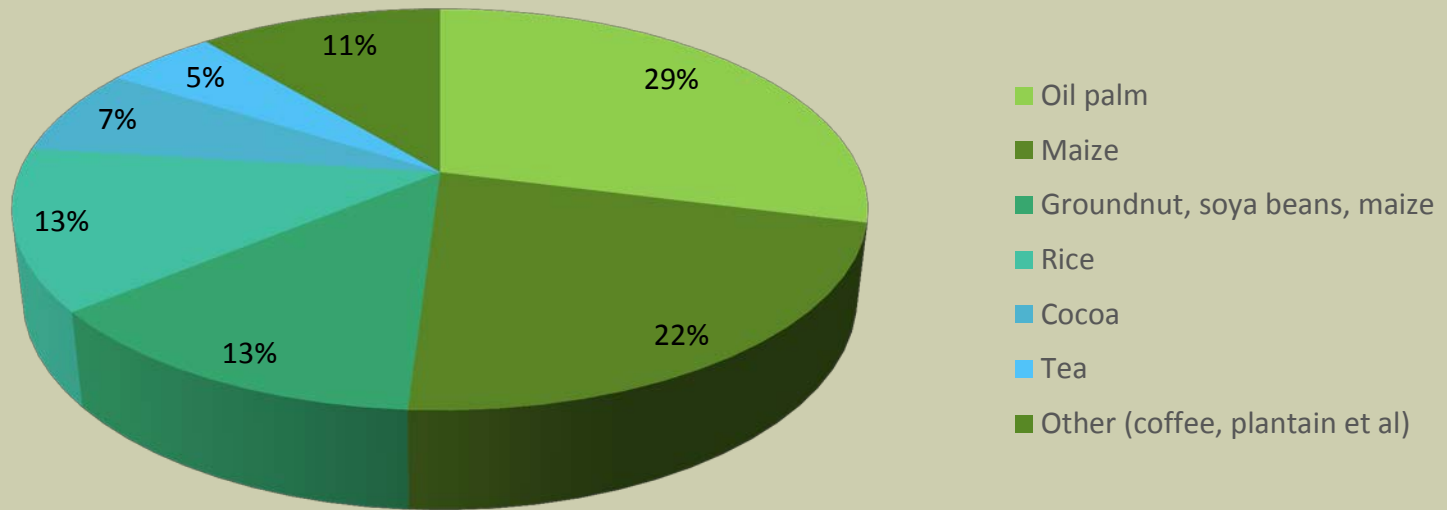
There are benefits and risks involved in financing each farm type. For instance, micro farms can be best served by credit unions but the clients (usually) will not have any proper collateral and the time spent in assessing the farmer will not yield enough profits. Also, if there is an unexpected event (family event or crop failure), the micro farmer will not have any other means to repay the loan.

4a. Farm classification and profiling – Case Study

General characteristics	Farm profile: North West Region, Cameroon		
	Micro farmer	Very Small farmer or very small livestock producers	Small and medium farmer and/or livestock producer
Purpose of production	Mainly subsistence	Market and family	Market
Farm location	Rural areas, between urban residences	Rural or urban areas	
Land / herd size	<1 ha many plots	1 – 5 ha <500 layers <200 broilers <50 pigs	>5 ha > 500 birds >200 broilers > 50 pigs
Land ownership	Communal or untitled land in rural areas		
Source of labour	Mainly family	Family and hired	Hired
Mechanisation	Little or none	Little	Higher degree
Examples	Mixed maize, beans, soya, etc.	Potato, tomato, maize, cabbage, etc.	Potato, cabbage, carrots, maize, tea, coffee, rice, etc.

5. Major AVCs in NWR, Cameroon

Agriculture crop distribution on registered farms (>5 ha) in North West Region, Cameroon

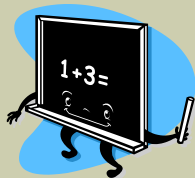


Note: This classification is based on only registered crops and most crops in Cameroon are not registered. For example, vegetables and Irish potatoes are key crops produced in NWR but they are not captured here.

5a. Major AVCs in NWR, Cameroon

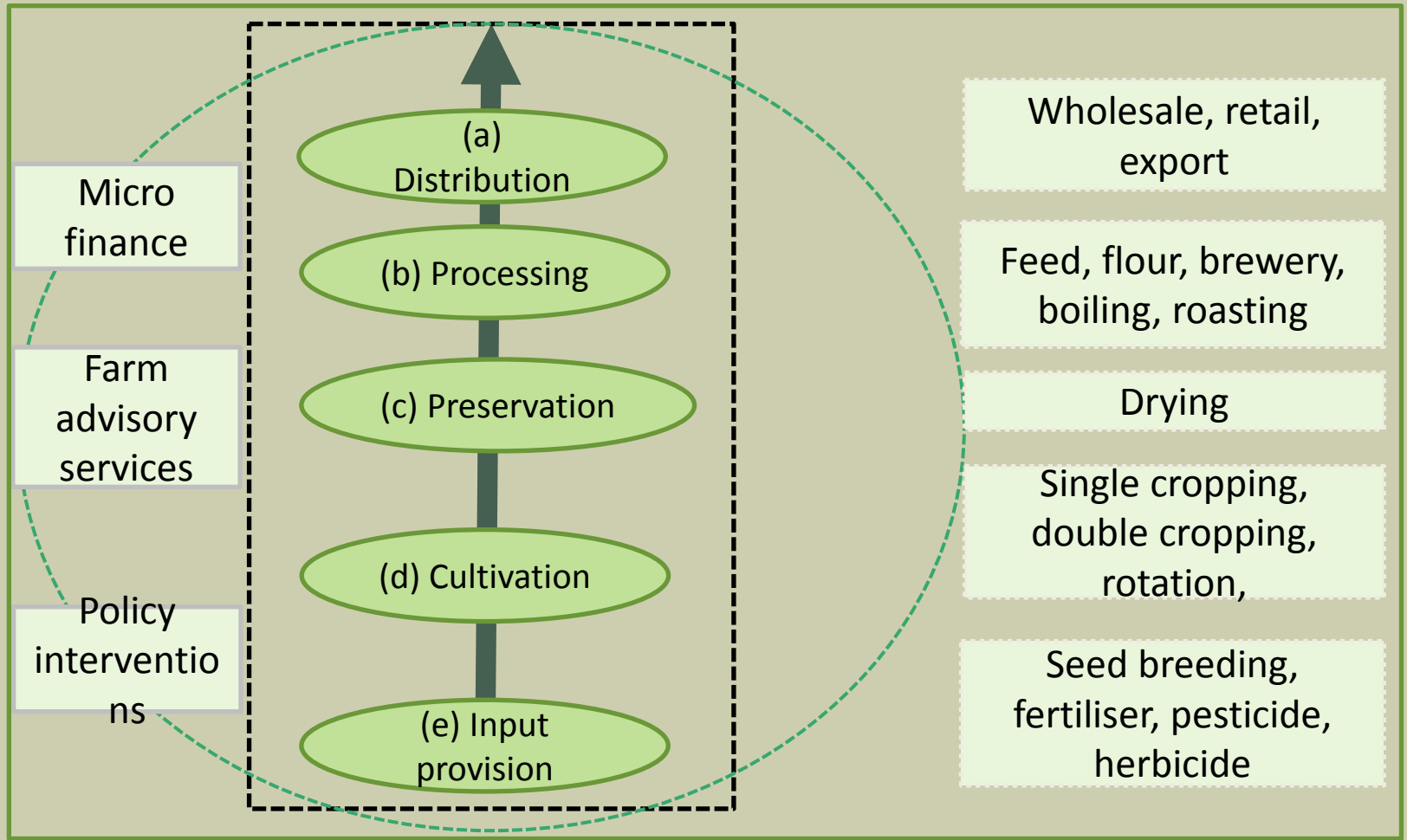
Other players (not farmers) in the AVCs in the NWR:

- Farmers' cooperatives or other farmers' groups (mainly NOWEFOR and NWCA)
- Input suppliers
- Processors (not common in the NWR)
- Transporters
- Distributors
- Sellers / Buyam-sellam
- Supporters: NGOs, parastatal organization, micro-credit institutions

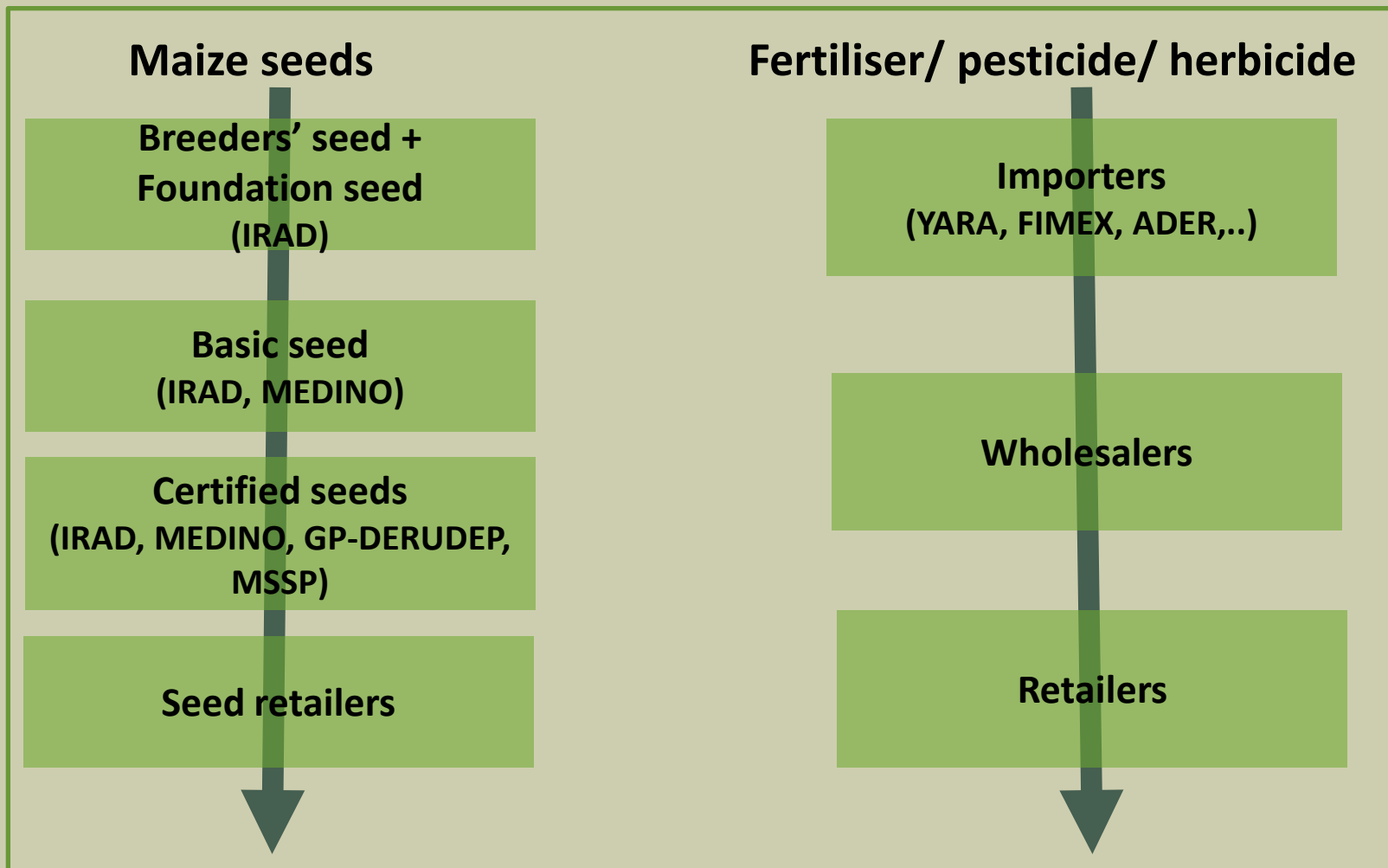


Are there any unique VC partners in your region that could be included in this list?

6. Maize value chain: NWR, Cameroon



6a. Input provision for Maize





6b. Annual maize cultivation cycle

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Clearing	[Grey bar spanning Jan to Dec]											
Tillage	[Black bar spanning Feb to Mar]											
Sowing	[Green bar spanning Mar to Apr]											
Fertiliser appl.	[Blue bar spanning May to Jun]											
Weeding	[Yellow bars spanning Apr to May and Jun to Jul]											
Harvesting	[Red bar spanning Aug to Oct]											

6c. Preservation practices for maize

Preservation by drying

Oven drying

Farmyard sun drying

Improved sun drying

Local smoking

6d. Processing methods for Maize

Dried maize

Corn flour

Brewers grits

Animal feed

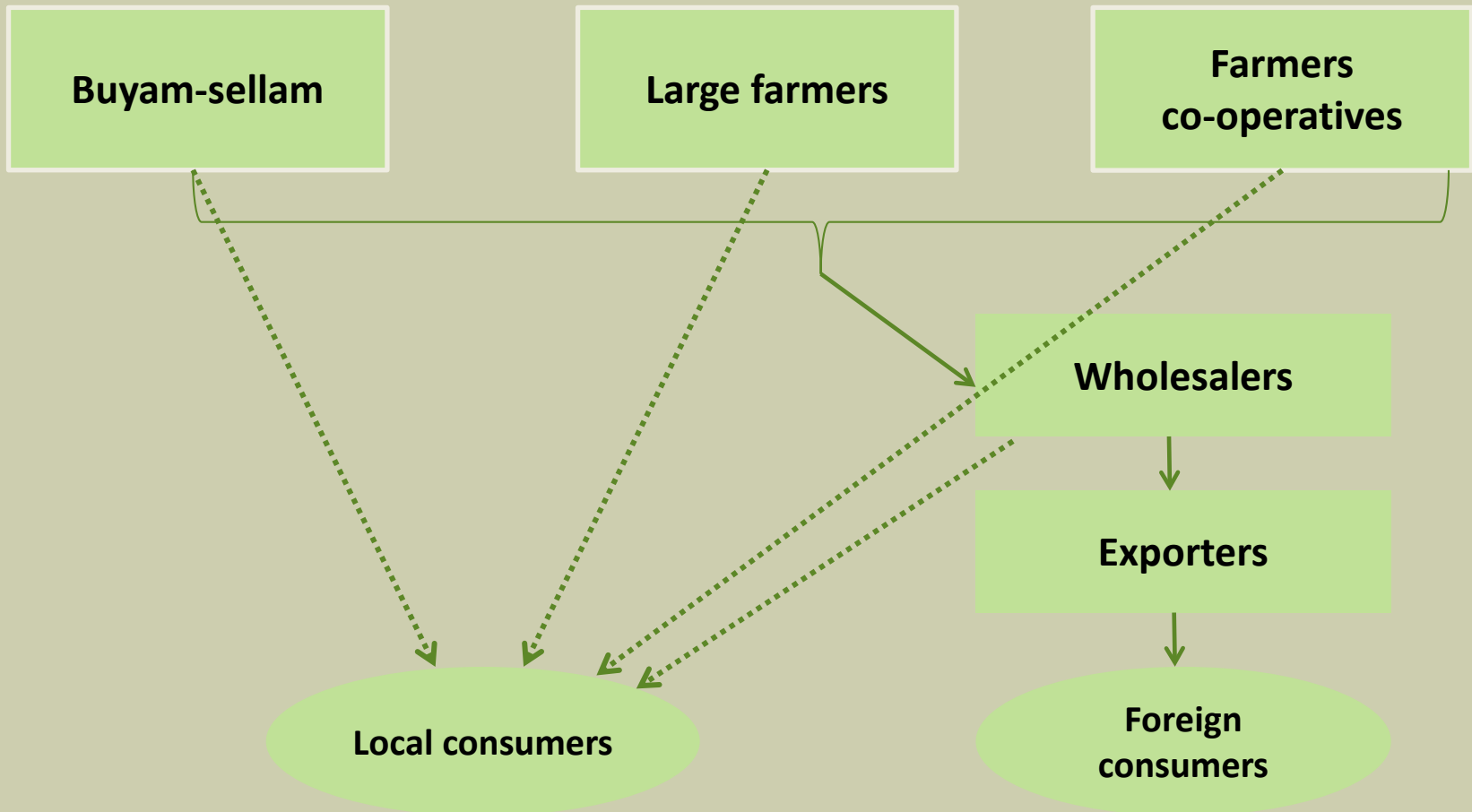
Fresh maize

Roasting

Boiling

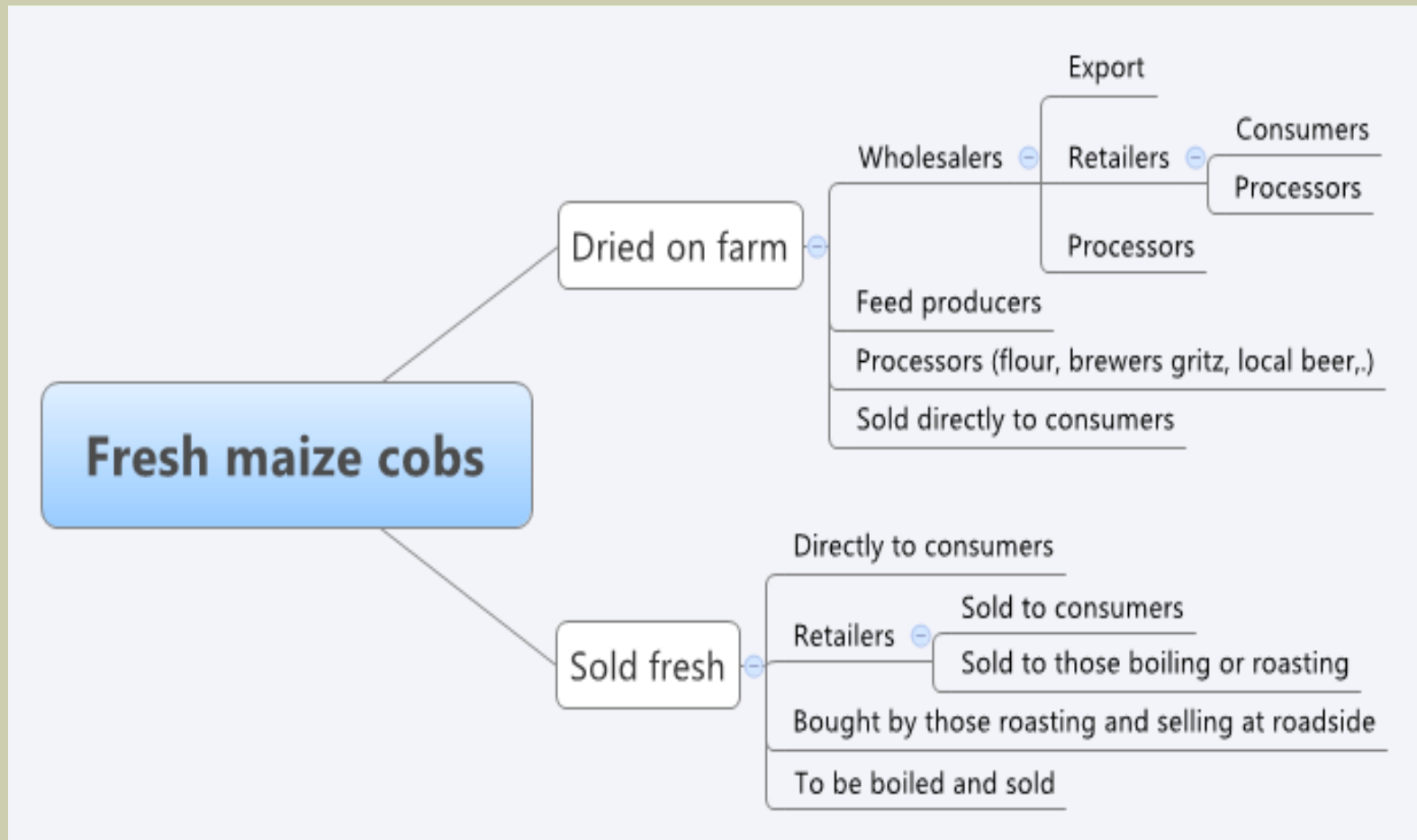


6e. Distribution channels for Maize



7. Maize value chain: Market trends and flow

Producers in the maize agricultural value chain



7a. Maize sales transaction details

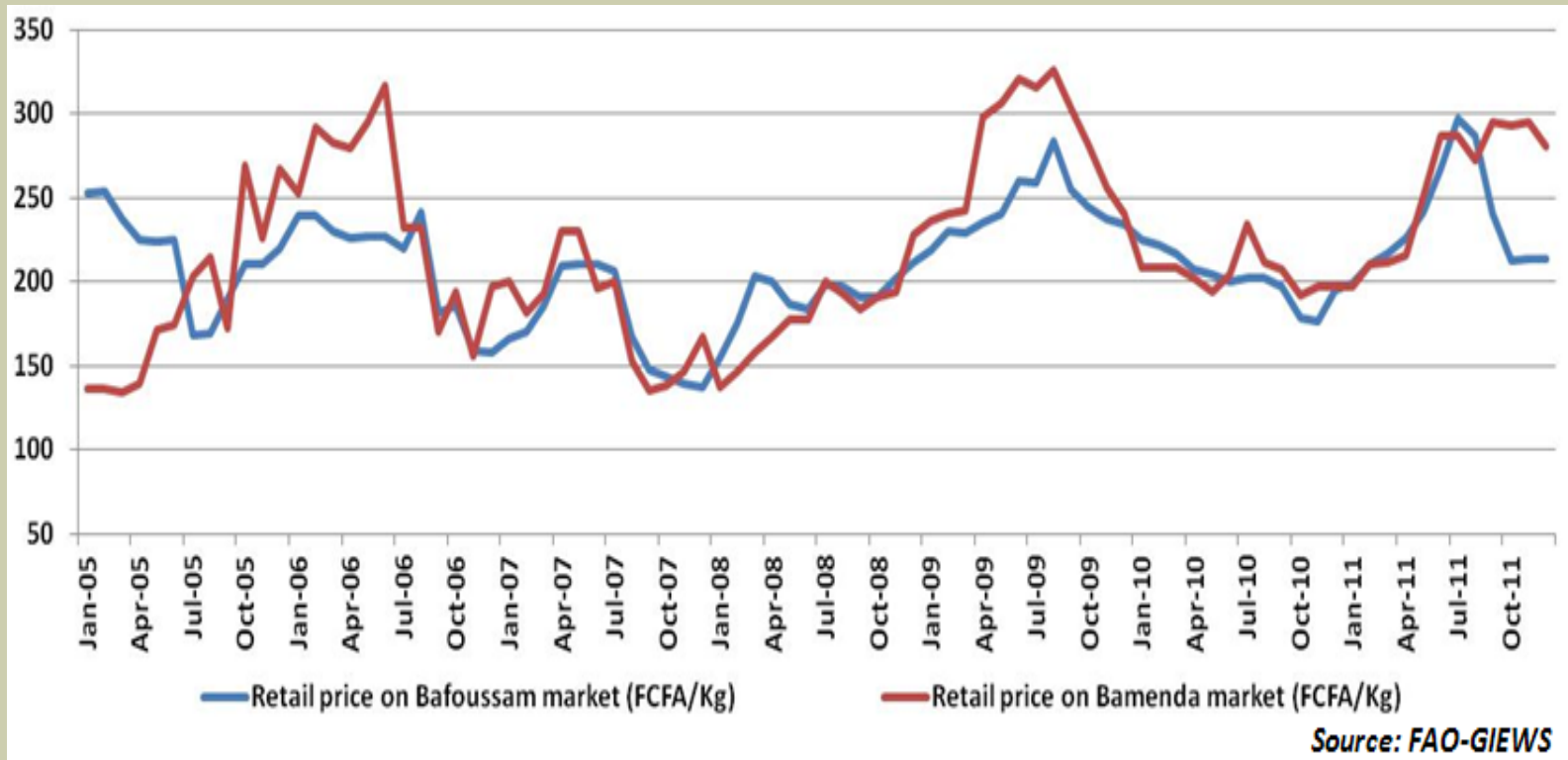
Raw material/ target product	Purchase price per unit (in XAF)	Costs incurred	Selling price per unit (in XAF)	Average margin
Fresh maize sold at farm gate to retailer	8 cobs at 200 (mixed sizes)	Transportation to market	4 – 5 cobs at 200	XAF 7/cob
Fresh maize sold at farm gate to women roasting	50 per cob (for large cobs) 5 moderate cobs at 200	Transportation, charcoal, grill	100 for large cob, 75 for average cob	XAF 19/cob
Fresh maize sold at farm gate to women boiling	50 per cob (for large cobs) 5 moderate cobs at 200	Transportation, wood, water, pot	100 for large cob, 75 for average cob	XAF 23/cob
Dried maize sold at farm gate to retailer	135 XAF/kg (in rural areas)	Transportation, loading	230/kg	XAF 80/kg
Dried maize sold at farm gate for flour production	135 XAF/kg (in rural areas)	Transportation, milling, packaging	250 – 350/kg	XAF 65/kg
Dried maize sold at farm gate for feed production	135 XAF/kg (in rural areas)	Transportation, milling		

7b. Market price trends for Maize in 2011

Month	Price for one bucket of Maize (15-16kg) as of 2011					
	Bamunka	Jakiri	Mankon	Nkambe	Wum	Fundong
January	2,000	1,600	3,900	2,500	2,500	3,500
February	2,100	1,600	3,500	2,500	3,000	3,400
March	2,250	4,000	3,520	2,800	3,000	3,500
April	2,900		3,270	2,800	3,000	3,450
May	2,900		3,750	3,000	3,500	3,300
June	2,900		4,000	3,500	4,000	3,400
July	2,500		3,390	3,500	3,000	2735
August	2,400		4,325	3,000	2,700	2,850
September	2,200	2,300	3,950	2,500	2,700	2,,365
October	2,500		3,850	2,500	3,000	2425
November	2,800		3,385	2,500	3,000	2,500
December	3,000	3,000	-	2,500	2,800	3,170

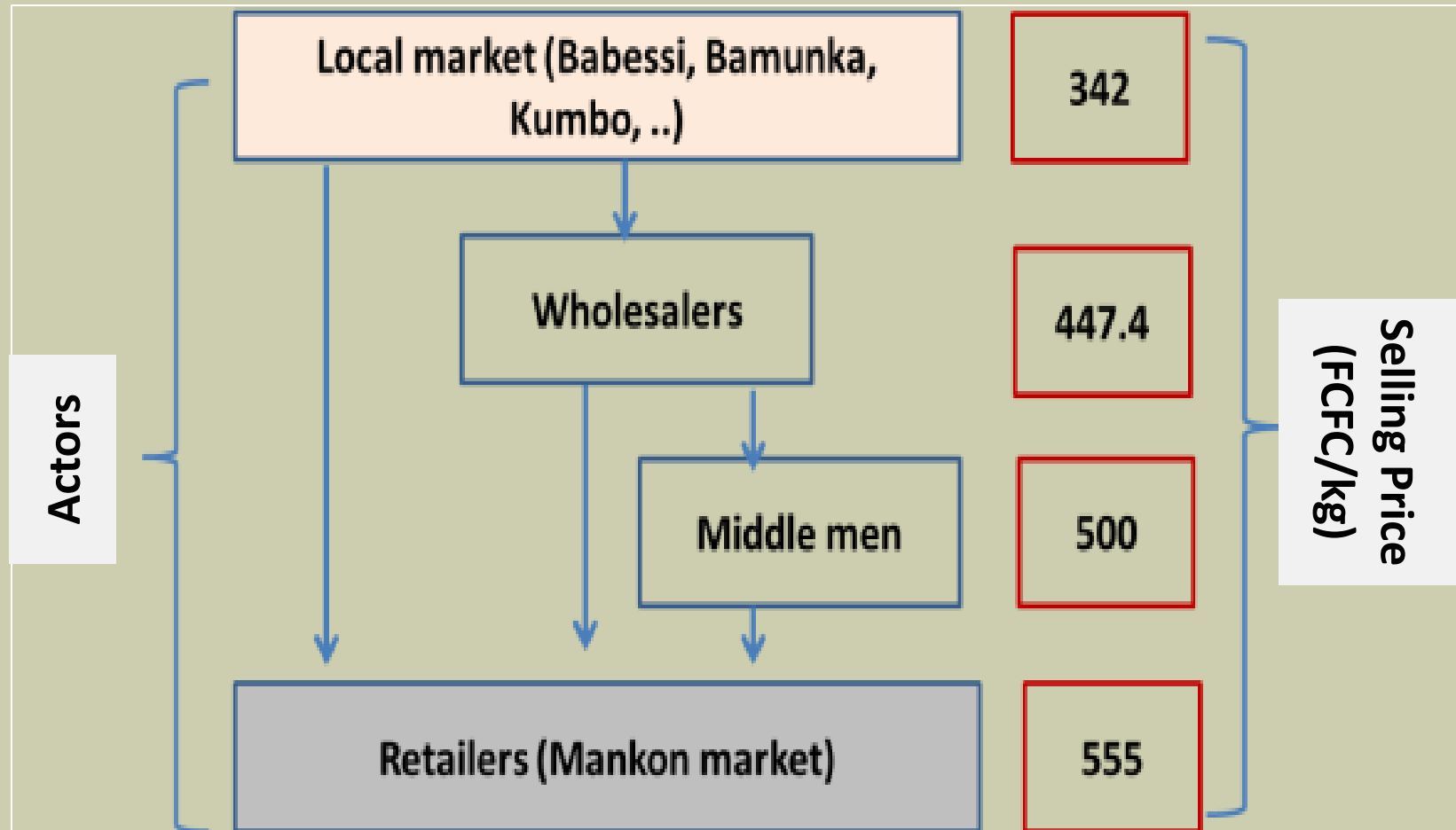
Participants should note monthly price trends and price gaps in some cities

7c. Maize retail pricing from 2005 to 2011



Participant should note the variations in pricing across the timeline and between markets. Irregular trends indicate that repayment plan cannot be based on previous year's prices and should be calculated conservatively.

7d. Selling prices for each actor in the Maize value chain based on market pricing



Further references on AVC financing

- Royal Tropical Institute/International Institute for Rural Reconstruction
- Calvin Miller and Linda Jones, Agricultural Value Chain Finance, Tools and lessons
- Creating access to Agricultural Finance, AFD revue “à savoir”

Annexure: Role and financing needs of value chain partners

Partner	Role in the Value Chain	Need for finance
Input supplier	Provide seeds, fertilisers, chemicals, fuels, equipment, sometimes technical knowledge	Working capital to buy and stock inputs in adequate quantities at the right time. Provide these on credit to farmers.
Day workers	Provide seasonal labour	Need to be paid at the end of each work day.
Farmers	Grow crops and raise animals. May take part in some postharvest processing and marketing	Working capital to buy inputs and pay seasonal labour. Capital or term loans for investment in equipment, storage, animals and land, including clearing previously unused land. Payment services, savings products, various types of insurance including crop insurance.
Farmers' organisations	Bulking inputs and/or farmer outputs to gain economies of scale and better prices. Advocacy, access to technology. Working capital to buy farm inputs for distribution to farmers	Working capital to buy farm inputs for distribution to farmers. Working capital to buy produce from farmers for delivery to traders or other sales channels. Capital or term loans for investment in storage, transport and (pre)processing facilities.
Rural traders Collection centres	Buy agricultural produce and bulk-sell it. Sometimes testing and quality certification	Working capital to buy agricultural produce. Capital or term loans for investment in storage facilities, transportation equipment or testing/certification equipment. Insurance.

Annexure: Role and financing needs of value chain partners (contd.)

Partner	Role in the Value Chain	Need for finance
Processors	Transform the product into a marketable commodity or consumer product	Working capital to buy agricultural produce. Capital or term loans for investment in production facilities. Insurance (natural disasters, theft, loss).
Distributors , wholesalers	Sell to local retailers, supermarkets	Working capital to buy processed agricultural products. Working capital to provide stock finance to retailers. Capital or term loans for investment in storage facilities and transportation equipment.
Exporters, importers	Sell to international buyers (commodities or processed products)	Working capital to buy processed agricultural products or unprocessed agricultural commodities. Factoring/forfeiting services (on behalf of suppliers). International trade finance (e.g. L/C). Insurance (natural disasters, theft, loss).
Retailers	Sell to consumers	Working capital to buy processed agricultural products. Capital or term loans for investment in shop inventory. Insurance (natural disasters, theft, loss).
Consumers	End users	Personal loans or salary advances.

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www.AgriFin.org

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