COMMODITIES VALUE CHAIN ANALYSIS OF MAJOR ROOTS, TUBERS, BANANAS, GRAIN LEGUMES, AND CEREALS IN THE EASTERN PART OF DR Congo

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Presentation Outline

- ✓Context
- ✓Objectives
- ✓Methodology
- ✓Key results
- ✓Recommendations

Context

Agriculture:

- Backbone of DRC economy in terms of its share of national wealth (GDP) and employment.
- Contributes for more than 40% of the GDP and occupies more than 70% of the population living in rural area

However

- Nearly 70% of its population being food insecure
- Nearly 70% of farmers live in abject poverty

Context

- Many efforts have been centered to production improvement through agricultural intensification to building up farmers' production capabilities.

- However, intensification of production systems must be built upon the establishment of efficient and well-functioning markets and trade systems.

- Need to understand and improve agricultural value chains that has become a key element in strategies to promote rural development and reduce poverty.

- The purpose was to trace out the different channels of roots and tubers, bananas, cereals and grain legumes commodities within two provinces (South Kivu and North Katanga) in DRC

VCA Objectives

Main objective:

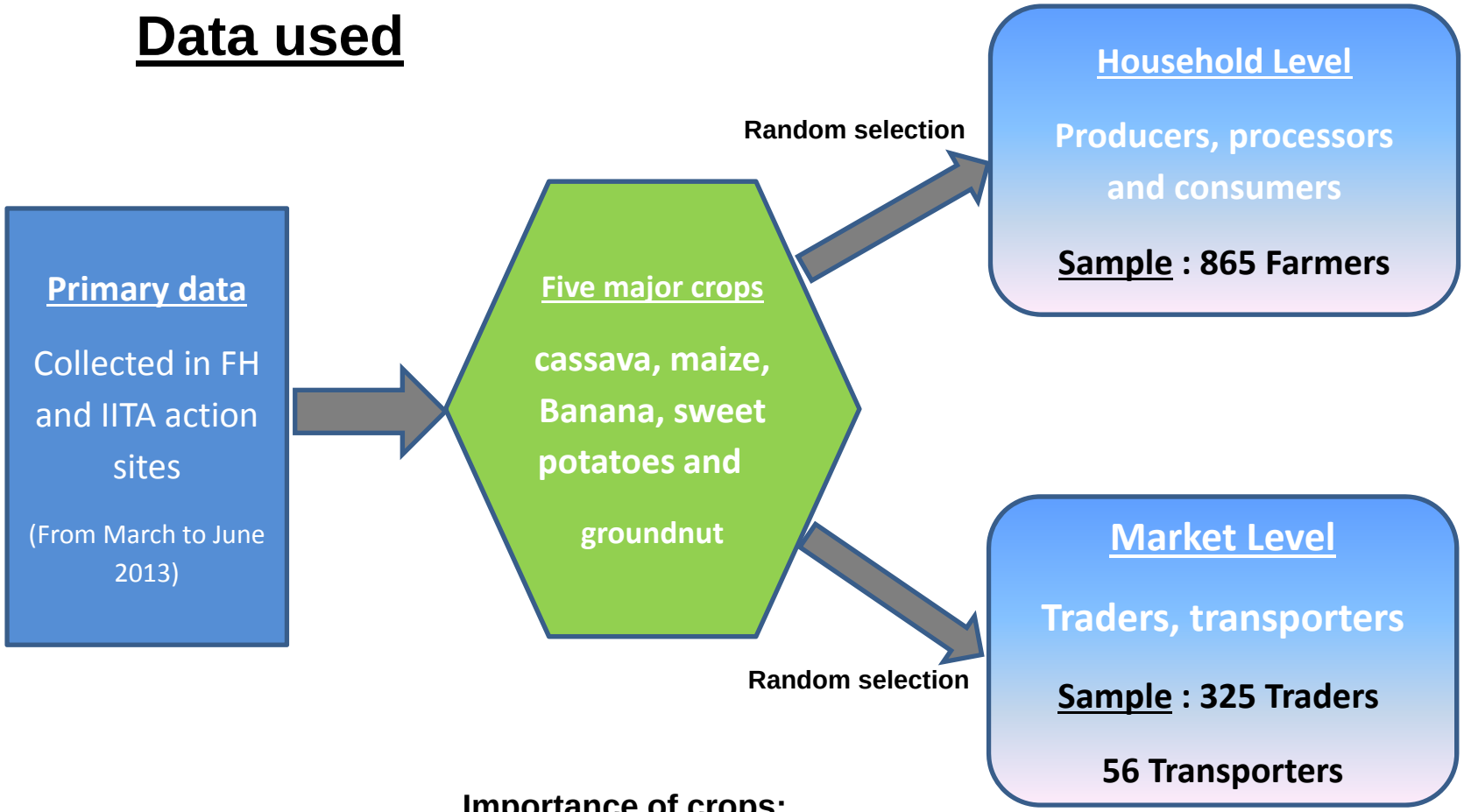
The study was attempted to Analyze systematically the value added of each commodity along the chain and provide comprehensive information of the sub-sectors.

Specific objectives:

- Identify the key actors involved in the value chain of each commodity;
- Determine the value added of each commodity along the chain;
- Identify constraints and opportunities at different levels of the chain.

VCA Methodology

Data used



Survey data

Importance of crops;

livelihood contribution & consumption habit

Specific questionnaires

Methodology

➢ **Analytical framework : Simple Value Chaine analysis**

	Input supply	Production	Marketing	Processing	Consumption
Activities	**Supply of:** • Seed • Pesticide • Fertilizers	• Crop production	• Collection • Transportation • Commercilization	Processing	Consuming
Actors	Research, multiplication centers, traders	• Farmers	• Traders	Processors	Consumers

Focus on : Famers
Traders
Processors
Consumers

VCA as a three-step process:

1. Activity Analysis: identification of the activities;
2. Value Analysis: addition of the greatest value; and
3. Evaluation and Planning: whether it is worth making changes, and then planning for the actions.

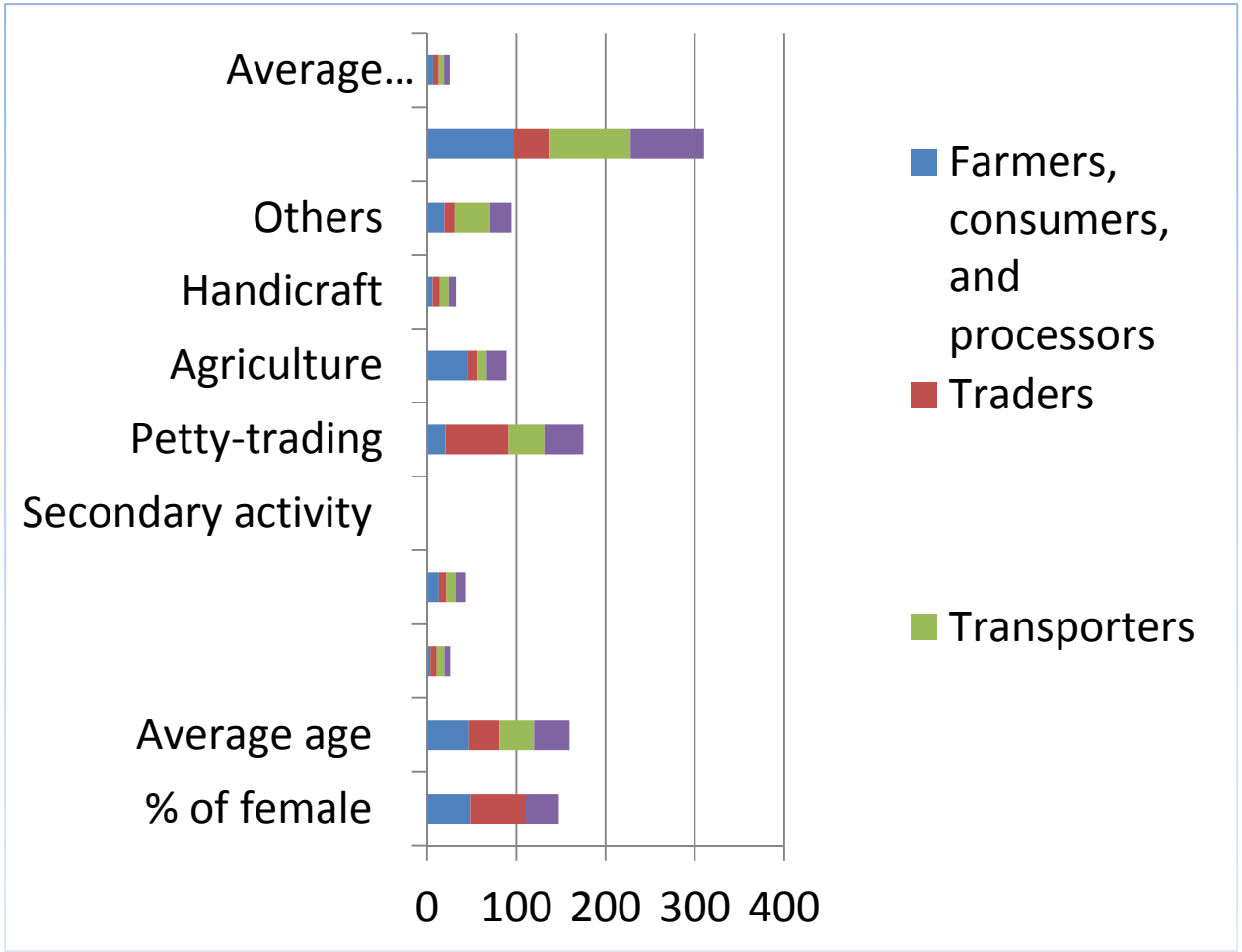
Methodology

Value addition breakdown

	Cost and margins	Producers	Processors	Traders	Transporters
Input	Total Variable Cost (TVC)	Seeds , Fertilizer, Pesticide, Labor,……	Raw materials, Packing, Cooking sticks, Labor,….	Purchase cost, Packing cost, Accommodation Taxes, Barriers, Transport costs..	Fuel, Lubricant, Tyres, Breakdown, Taxes,…
	Total Fix Cost (TFC)	Hoes, Cutlasses, Baskets , tractors,….	Machines, Tools,…..	Investments….	Vehicle,….
Output					
	Quantity produced	QP			
	Quantity sold	QS			
	Sale prices	SP			
	Total revenue	TR=QS*S			
	Gross profit	GP=TR-TVC			
	Net profit	NP=GP-TFC			

Key results

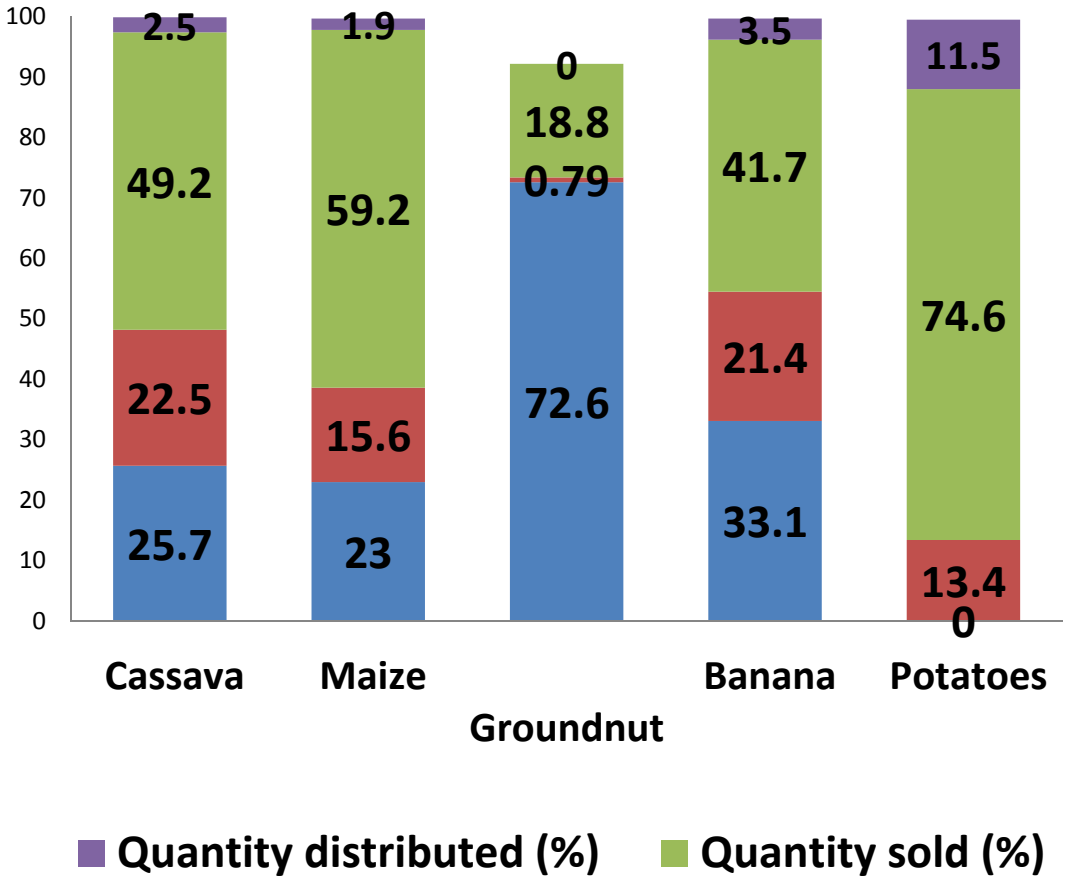
Socio-economic characteristics of actors along the chain



- Increasing participation in associations
- Low level of education in all the sub-sectors along the chain
- Large household size among farmers
- Increasing diversification of income sources
- Women are absent in transport sub-sector

Key results

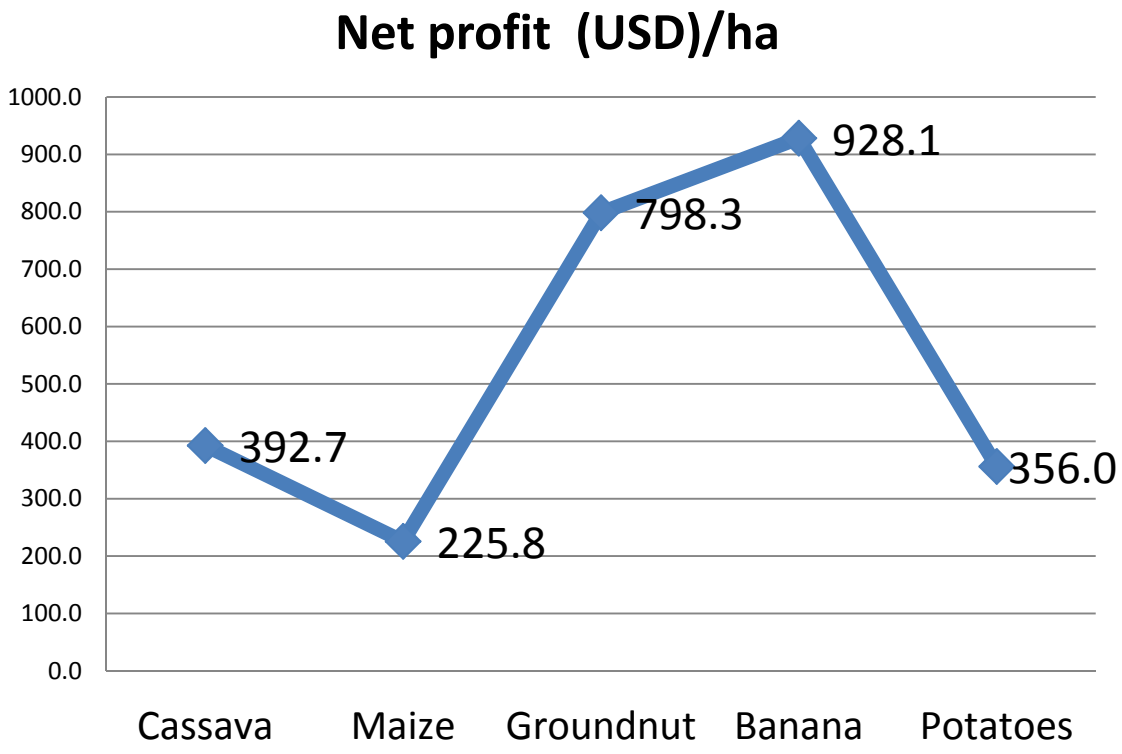
Production and its Destination



- 48.7% of production are oriented to market participation : Increasing non-food needs

Key results

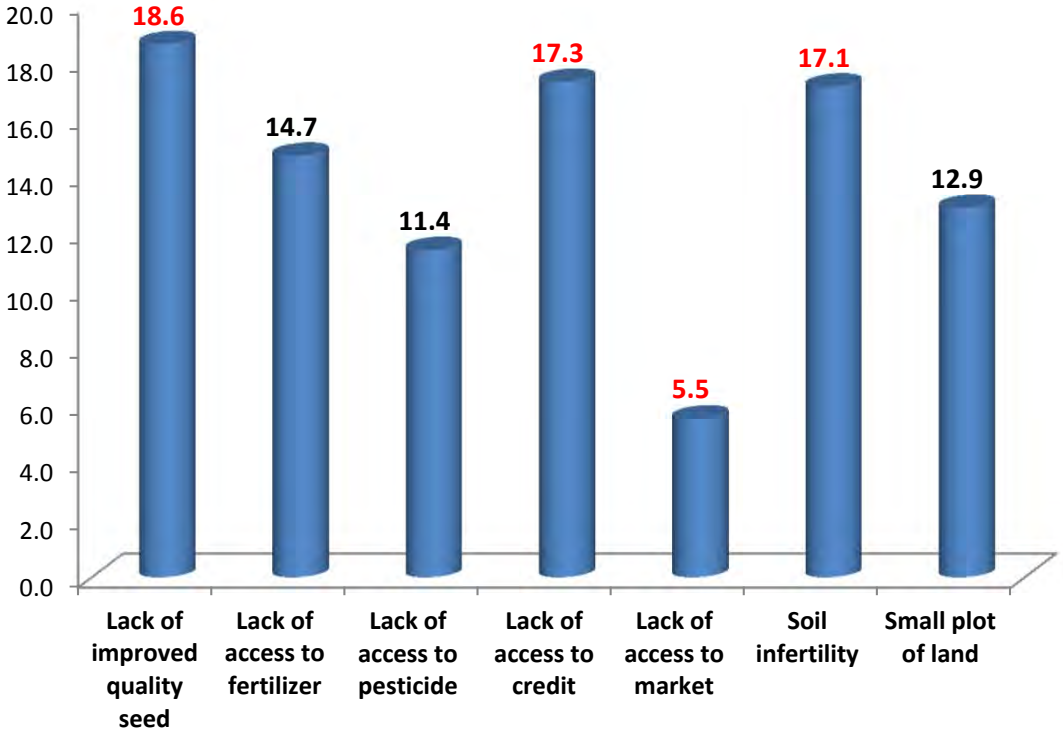
Value addition in production



Production : Sub-sector having the highest value addition but the activity remains sesonal for most of commodities

Key results

Production constraints (%)



Major production constraints are:

- ✓ Lack of improved quality seed,
- ✓ Lack of access to credit and
- ✓ Soil infertility

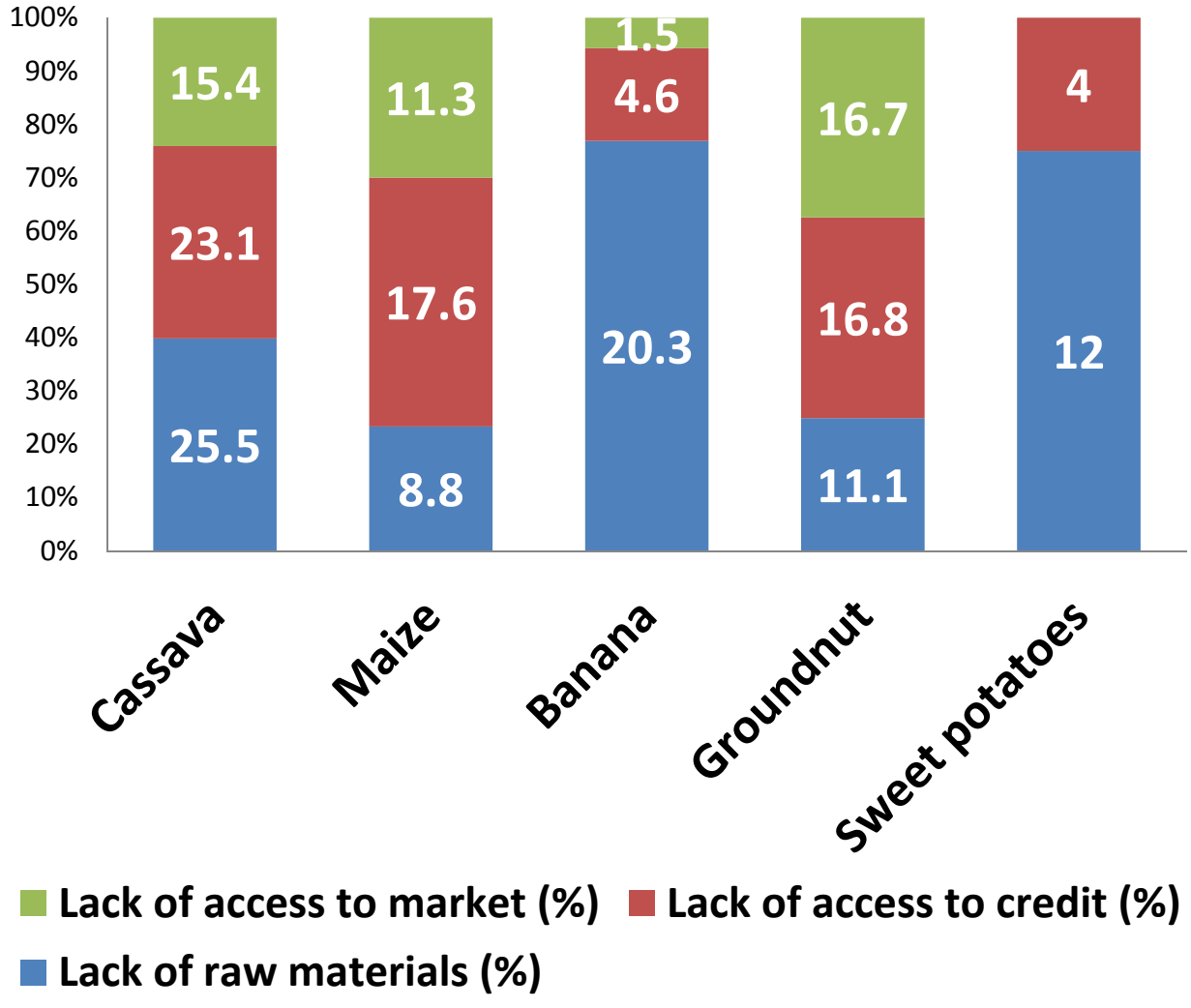
Processing value added

Processing costs and margins	Items	Cassava	Maize	Groundnut	Banana	Sweet potatoes
Input cost (USD)	Raw materials	10.7	15.6	-	-	-
	Packing	0.9	0.0	-	-	-
	Cooking sticks	0.4	0.0	-	-	-
Total Input cost		11.8	15.6	-	-	-
Hired labor cost		15.4	39.0	-	19.4	-
Total Variable Costs (USD)	TVC	34.7	57.6		19.4	-
Output						
Quantity Sold (kg or bunch)	QS	220.8	272.6	-	27.5	-
Price (USD/kg or USD/bunch)	SP	0.6	0.5	-	2.6	-
Total Revenue USD)	TR=QS*SP	267.3	117.9	-	72.5	-
Gross Profit (USD)	GP=TR-TVC	232.6	60.4	-	53.1	-
Profit per unit (USD)	PU= GP / QS	1.1	0.2		1.9	-

Processing : The activity remains rudimentary with low Value Addition

Key results

Processing constraints



Key results

value addition in trading

Costs of trade and margins	Items	Cassava	Maize	Groundnut	Banana	Sweet potatoes
Trading costs	Purchase cost	27.3	158.7	60.0	18.6	19.0
	Packing cost	2.9	15.4	3.0	7.7	4.7
	Accommodation	12.7	9.7	13.1	1.0	4.2
	Taxes	11.8	20.4	22.1	0.6	0.6
	Barriers	9.0	15.5	11.7	1.5	3.1
	Transport costs	8.0	22.1	4.2	1.2	1.6
	Storage costs	23.1	15.3	4.7	7.4	6.2
	Loading and unloading costs	15.8	12.2	3.1	1.1	0.6
	Others	6.1	4.6	0.0	0.1	
Total Trading costs (USD/kg)	TTC	98.9	1537.2	120.2	39.2	40.0
Quantity sold (kg)	QS	864.3	905.0	102.7	866.7	500.0
Sale price (USD/kg or USD/l)	SP	0.8	0.7	1.3	0.4	0.3
Total revenue (USD)	TR=QS*SP	720.2	648.7	133.0	335.6	147.8
Gross profit (USD)	GP=TR-TTC	621.3	381.5	52.8	296.4	107.8
Profit per per unit (USD/kg)		0.7	0.4	0.5	0.3	0.2

Benefiting from market information increases trading margins

Market organization quality as perceived by traders

Crops	Appreciation (%)			
	Excellent	Good	Bad	Mediocre
Cassava	6.2	31.2	62.5	-
Maize	14.2	35.7	28.5	21.4
Groundnut	10,0	60,0	30,0	-
Banana	30,0	30,0	20,0	20,0
Sweet potatoes	-	71.4		28.5
All	**20.0**	**60.0**	**35.0**	**30.0**

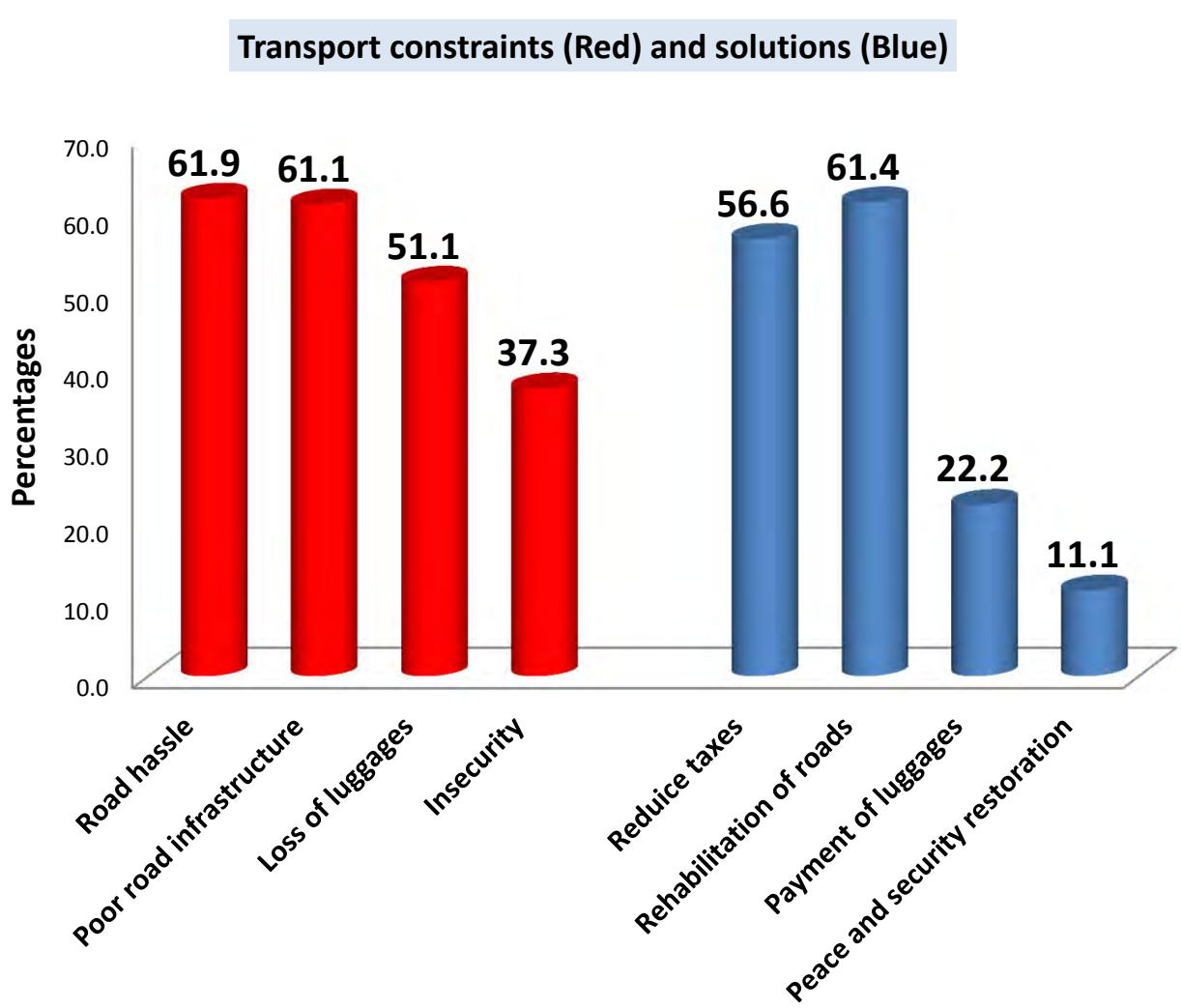
- Lack of infrastructures (such as Store houses), Many taxes,

Costs of transport and margins

Costs of transport and margins	Items	Cassava and its products	Maize and its products	Groundnuts and its products	Banana	Potatoes
Variable costs	Fuel	18.2	7.2	10.0	5.0	8.7
	Lubricant	65.6	7.6	3050.4	4.0	9135.5
	Tyres	206.2	60.9	44.7	33.3	73.3
	Breakdown	168.0	19.7	16.1	20.4	23.8
	Taxes	48.3	2.8	18.1	4.7	3.3
	Payeage route	0.6	0.5	0.6	0.7	0.6
	Others	9.9	1.0	4.3	0.6	1.3
Total Variable Costs (Fc)	TVC	523.2	99.8	106.5	52.7	120.1
Total Revenue (Fc)	TR	1275.1	117.9	493.9	78.8	144.6
Gross Profit (Fc)	GP=TR-TVC	751.9	18.0	387.4	26.1	24.5


Un camion bloqué dans un bourbier sur une route de desserte agricole en Rdc

Transport constraints and proposed solutions



Recommandations

Producers and processors should be empower

- The producers' capacity on commercial farming systems designed should be build to explore market opportunities by identifying potential markets.
- There is need to empower and implement strategic partnership with all value chain actors for attractive and mutual profits, and avoid farm exploitation situation (lose-win rather a win-win).

- For the NGOs and NARS intervening in agriculture, there is need to develop new agricultural systems to improve on soil fertility, seed quality and market accessibility.

- For policy planners, there is need to invest in infrastructure (roads, bridges) to open the region to other neighboring regions and make it accessible.


AKSANTI SANA!
THANK YOU VERY MUCH!