



Uíge, Angola, 25–29 November 2019



## National Green Export Review (NGER) of Angola Third Training Workshop: Coffee and Tropical Fruits

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# Value Chain Mapping: Coffee and Tropical Fruits

## **Outcome 1: SWOT Analysis**

During plenary sessions, participants selected five local green products (avocado, banana, coffee, orange, and pineapple). Based on this selection, a value chain mapping exercise was developed. The goal was to obtain an internal analysis of strengths and weaknesses based on local perceptions regarding the selected green products. The methodological approach uses the SWOT technique as a framework. The SWOT technique organizes participants' perceptions into two main categories: internal and external forces. The internal forces present local strengths and weaknesses that are under their area of influence (both directly and indirectly). The external forces present opportunities and threats outside their control. The tables below summarize stakeholder perceptions for each one of the selected green products.

Strengths <ul> <li>Availability of work force</li> <li>Low-cost production</li> </ul>	<ul> <li>Weaknesses</li> <li>Lack of specialized work force (i.e. technical knowledge)</li> <li>Low productivity</li> <li>Low quality</li> </ul>
<ul> <li>Opportunities</li> <li>Market interest, especially at local level</li> <li>Adequate climate and geographic conditions</li> <li>Availability of fertile land</li> <li>Market interest, especially at local level</li> <li>Exports, especially to SADC region</li> </ul>	<ul> <li>Threats</li> <li>Lacking distribution infrastructure (e.g. roads, electricity, storage, handling facilities, etc.)</li> <li>Lack of transformative industries to add value to produce</li> <li>Productive lands are not regularized</li> <li>Lack of financing mechanisms</li> <li>Strong international competition</li> <li>Pests and diseases</li> <li>Productive lands are not regularized</li> <li>Lack of certification centres</li> <li>Climate change impacts</li> </ul>

#### Table 1: SWOT analysis – Avocado



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#### Table 2: SWOT analysis – Banana

Strengths <ul> <li>Continuous production cycles</li> <li>Low-cost production</li> </ul>	Weaknesses         Lack of specialized work force (i.e. technical knowledge)         Low productivity         High volume of losses during handling
<ul> <li>Opportunities</li> <li>Local high demand</li> <li>Organic product by default (e.g. traditional agriculture practices)</li> <li>Adequate climate and geographic conditions</li> <li>Availability of fertile land</li> <li>Strategic location close to potential markets</li> <li>Market interest</li> <li>Financing options</li> </ul>	<ul> <li>Threats</li> <li>Lacking distribution infrastructure (e.g. roads, electricity, storage, handling facilities, etc.)</li> <li>Lack of transformative industries to add value to produce</li> <li>Productive lands are not regularized Strong international competition</li> <li>Pests and diseases</li> <li>Introduction of foreign varieties</li> </ul>

### Table 3: SWOT analysis – Coffee

Strengths <ul> <li>Low-cost production</li> </ul>	<ul> <li>Weaknesses</li> <li>Low productivity</li> <li>High volume of losses during handling</li> </ul>
<ul> <li>Opportunities</li> <li>Adequate climate and geographic conditions</li> <li>Availability of fertile land</li> <li>Strategic location close to potential markets</li> <li>Organic product by default (e.g. traditional agriculture practices)</li> <li>Local high demand</li> <li>Market interest</li> <li>Financing options</li> </ul>	<ul> <li>Threats</li> <li>Strong international competition</li> <li>Pests and diseases</li> <li>Introduction of foreign varieties</li> <li>Lacking distribution infrastructure (e.g. roads, electricity, storage, handling facilities, etc.)</li> <li>Lack of specialized work force (i.e. technical knowledge)</li> <li>Lack of transformative industries to add value to produce</li> <li>Productive lands are not regularized</li> <li>Lack of certification centres</li> </ul>

#### Table 4: SWOT analysis – Orange

Strengths         • Availability of work force         • Low-cost production         • Existence of cooperativities	<ul> <li>Weaknesses</li> <li>Lack of specialized work force (i.e. technical knowledge)</li> <li>Lack of seeds/seedlings</li> <li>Low productivity</li> </ul>
<ul> <li>Opportunities</li> <li>Adequate climate and geographic conditions</li> <li>Availability of fertile land</li> <li>Market interest, especially at local level</li> </ul>	Threats         Lacking distribution infrastructure (e.g. roads, electricity, storage, handling facilities, etc.)         Lack of financing mechanisms         Strong international competition         Pests and diseases         Climate change impacts         Lack of transformative industries to add value to produce         Productive lands are not regularized

#### Table 5: SWOT analysis - Pineapple

Strengths         • Availability of work force         • Low-cost production         • Existence of cooperativities	Weaknesses         •       Lack of specialized work force (i.e. technical knowledge)         •       Low productivity
Opportunities <ul> <li>Adequate climate and geographic conditions</li> <li>Availability of fertile land</li> <li>Market interest, especially at local level</li> <li>Exports, especially to SADC region</li> <li>Financing options</li> </ul>	<ul> <li>Threats</li> <li>Lack of transformative industries to add value to produce</li> <li>Productive lands are not regularized</li> <li>Lacking distribution infrastructure (e.g. roads, electricity, storage, handling facilities, etc.)</li> <li>Strong international competition</li> <li>Pests and diseases</li> <li>Climate change impacts</li> </ul>

In general, all selected green products face similar internal and external forces, which ratifies the strong synergies among them. However, a point of conflict exists when it comes to financing (see table 6). Some stakeholders perceived financing as an opportunity and mentioned financing options, especially for banana, coffee, and pineapple production. Other participants pointed out financing as threat because of the lack of financing mechanisms to foster local green produce, especially since most productive land is not regularized.

#### Table 1: SWOT analysis - Combined responses for five selected green products

Strength         • Continuous production cycles         • Availability of work force         • Low-cost production         • Existence of cooperativities	Weaknesses  Lack of specialized work force (i.e. technical knowledge) Low productivity Lack of seeds/seedlings High volume of losses during handling
<ul> <li>Opportunity</li> <li>Adequate climate and geographic conditions</li> <li>Availability of fertile land</li> <li>Strategic location close to potential markets</li> <li>Organic product by default (e.g. traditional agriculture practices)</li> <li>Local high demand</li> <li>Market interest, especially at local level</li> <li><u>Financing options</u></li> <li>Exports, especially to SADC region</li> </ul>	<ul> <li>Threat</li> <li>Strong international competition</li> <li>Pests and diseases</li> <li>Introduction of foreign varieties</li> <li>Lacking distribution infrastructure (e.g. roads, electricity, storage, handling facilities, etc.)</li> <li>Lack of specialized work force (i.e. technical knowledge)</li> <li>Lack of transformative industries to add value to produce</li> <li>Productive lands are not regularized</li> <li>Lack of certification centres</li> <li>Lack of certification centres</li> <li>Climate change impacts</li> </ul>

## Outcome 2: Mapping of value chains

During the workshop, participants provided detailed records showing trends, performance, income, and profits for banana, but not for the other three fruits (avocado, orange and pineapple). However, stakeholders did provide important information about the dynamics of the value chains for all four fruits and the range of profit margins in each step, which can vary from 12% to 74%.

During the interactive section for mapping the value chain, participants produced an estimate of values for the banana trade in Angola, which could be inferred to the other selected fruits. Participants producing different fruits shared similar experiences when selling their produces despite having different production costs and final selling prices. Hence, numbers related to potential profit margins are approximately the same when trading fruits. One important outcome is the estimative of losses. This is a concerning issue regarding the value chain of fruits in Angola: participants estimate that between 30% and 40% of produce is lost before reaching final consumers. In short, for every 1kg of fresh fruit being harvested losses can amount to 400 kilograms of waste. Remarkably, participants' perceptions indicate that most losses occur between production sites and first-tier buyers due to the lack of storage, incorrect handling, and inadequate transport. **Figure 1** shows the banana's value chain in kwanzas (Kz) per type of farming arrangement, small-scale farmers *versus* cooperatives. Noteworthy is the price difference between street markets and a supermarket. For example, the price of one kilo (1 kg) of banana in a given supermarket (second-tier buyers) is 1,800 Kz, while banana is sold in the streets (first-tier buyers) for 230 Kz per kilogram or 86% cheaper than a supermarket.<sup>1</sup>

	Smal	Scale Farmers			Brokers		F	irst-Tier Buyers		Wholes	ale and Retail Mark	ets	Se	cond-Tier Buyers	
For every 1 kg	roduction Costs S	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit
of banana	\$ 100.00 \$	112.00 \$	12.00	\$ 112.00	\$ 134.00 \$	22.00	<u>\$ 1</u> 34.00	\$ 230.00 \$	96.00	\$ 230.00	\$ 391.00 \$	161.00	\$ 391.00	\$ 1,800.00 \$	1,409.00
UI Dallalla	Potent	tial Profit Margin		Potential Profit Margin			Pot	tential Profit Margin		Po	tential Profit Margin		Po	tential Profit Margin	
		12%			20%			72%			70%			360%	
			Coope	rative											
	Smal-Scale F	armers in Cooper	atives		Brokers		F	irst-Tier Buyers		Wholes	ale and Retail Mark	ets	Se	cond-Tier Buyers	
For every 1 kg	roduction Costs	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit
, ° ¢	\$ 100.00 \$	134.00 \$	34.00	\$ 134.00	\$ 134.00 \$	-	\$ 134.00	\$ 230.00 \$	96.00	\$ 230.00	\$ 391.00 \$	161.00	\$ 391.00	\$ 1,800.00 \$	1,409.00
of banana	Potent	tial Profit Margin		Po	tential Profit Margin		Pot	tential Profit Margin		Po	tential Profit Margin		Po	tential Profit Margin	
		34%			0%			72%			70%			360%	

Figure 1: Banana value chain for small-scale farmers and cooperatives (in kwanzas)

<sup>&</sup>lt;sup>1</sup> Information available at: <u>https://pt.preciosmundi.com/angola/precos-supermercado</u>

As described by participants, in Angola, most fruits (e.g. avocado, pineapple and orange) follow similar value chain figures regarding profit margins because they rely on the same distribution channels dominated by banana brokers to reach local markets. For example, small-scale farmers in average face up to 810 Kz as production costs and first-tier buyers pay around 1,250.00 Kz per kilogram of pineapple. During discussions at plenary sessions, the groups presenting other selected fruits – avocado, pineapple and orange – described similar profit margins despite having different production costs and final selling price.

The coffee value chain presents a different arrangement, with a more elaborate structure than other selected products because it presents a more organized distribution/market system. It is important to mention that for each 1 kg of commercial coffee being sold in the markets, small-scale farmers had to harvest 4 kg of coffee berries in Angola. **Figure 2** shows the coffee's value chain in kwanzas per type of farming arrangement, small-scale farmers *versus* cooperatives.

	Small-Scale	e Farmers			Brokers			First-Tier Buyers		Wholes	sale and Retail Mark	ets	Se	cond-Tier Buyers	
For every 1 kg	Production Costs Selling	5	rofit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit
of coffee		172.00 \$	22.00	\$ 172.00	\$ 200.00 \$	28.00	\$ 200.00	\$ 250.00 \$	50.00		\$ 360.00 \$	110.00		\$ 1,920.00 \$	,
or conce	Potential Profit Margin Potential Profit Margin			Potential Profit Margin		Po	Potential Profit Margin			tential Profit Margin					
	15	5%			16%			25%			44%			433%	
_															
			Coope	rative											
	Small-Scale Farme	ers in Cooperativ	ves		Brokers			First-Tier Buyers		Wholes	sale and Retail Mark	ets	Se	cond-Tier Buyers	
For every 1 kg	Production Costs Selling	g Price Pr	rofit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit	Buying Price	Selling Price	Profit
of coffee	\$ 110.00 \$ 2	200.00 \$	90.00	\$ 200.00	\$ 200.00 \$	-	\$ 200.00	\$ 250.00 \$	50.00	\$ 250.00	\$ 360.00 \$	110.00	\$ 360.00	\$ 1,920.00 \$	1,560.00
of collee	Potential Pr	rofit Margin		Po	tential Profit Margin		Pc	tential Profit Margin		Po	tential Profit Margin		Pot	tential Profit Margin	
	82	2%			0%			25%			44%			433%	

#### Figure 2: Coffee's value chains for small-scale farmers and cooperatives (in kwanzas)

One important outcome is the key role of cooperatives on reducing production costs and risks, improving selling prices, increasing profit margins, and shortening the connection between producers and consuming markets.

## Outcome 3: Action Plan

The purpose of the action plan is to design interventions for each strategic objective identified during the workshop. The following tables present potential strategies which could assist policymakers in Angola to design their own strategies to foster local sustainable development in the country through green exports.

<b>OBJECTIVE 1:</b> To foster the development of cooperatives								
Action		Sub-action	Performance Indicator	Implementation Partners				
1.1 Promotion of associations, cooperatives and solidarity arrangements	1.1.1	Training of producers (e.g. small-scale farmers)	Number of trained producers	Provincial government				
	1.1.2	Creation of training centres for cooperatives	Number of established training centres	National government Provincial government				
	1.1.3	Creation of training and entrepreneurship programmes for cooperatives	Number of trained cooperatives	National government				
	1.1.4	Facilitating the registration and regularization of cooperatives	Number of registered cooperatives	National government				

<b>OBJECTIVE 2:</b> To increase production of Green Products								
Action		Sub-action	Performance Indicator	Implementation Partners				
	2.1.1	Creation of training centres for producers	Number of established training centres	IDA (Institute for the Development of Agriculture)				
2.1 Promotion of associations, cooperatives and solidarity arrangements	2.1.2	Training of technicians	Number of trained technicians	IDA EDA (Agricultural Development Stations)				
	2.1.3	Creation of training crops	Number of trained producers	EDA				
2.2 Adoption of modern production practices	2.2.1	Nursery production	Number of established nurseries	IDA EDA Cooperatives				
	2.2.2	Seedling distribution centres	Number of distributed seedlings	IDA EDA Cooperatives				
	2.2.3	Creation of phytosanitary control (checking points)	Number of checking points established	National government				

OBJECTIVE 3: To improve distribution channels								
Action		Sub-action	Performance Indicator	Implementation Partners				
3.1 Improvement of access routes	3.1.1	Improving tertiary access routes	Number of improved kilometres	Provincial government				
	3.1.2	Improving primary and secondary access routes	Number of improved kilometres	National government Provincial government				
3.2 Creation of storage and conservation infrastructure	3.2.1	Creation of storage and conservation centres	Number of established storage and conservation centres	National government Cooperatives				
3.3 Improvement of transport	3.3.1	Fostering transportation by refrigerated cars	Percentage of production transported by refrigerated cars	National government Cooperatives				

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OBJECTIVE 4: To facilitate access to credit lines								
Action		Sub-action	Performance Indicator	Implementation Partners				
4.1 Creation of credit lines for cooperatives	4.1.1	Publicizing of credit lines for cooperatives	Number of approved contracts	National government Banks				
	4.1.2	Creation of a Guarantee Fund for cooperatives	Number of approved contracts	National government Banks				
4.2 Facilitating the access to existing credit lines	4.2.1	Creation of support centres for producers to deliver the necessary documentation for accessing existing credit lines (property regularization, guarantees, etc.)	Number of producers with access to credit	National government				

OBJECTIVE 5: To promote certification					
Action	Sub-action		Performance Indicator	Implementation Partners	
5.1 Mapping certification programmes	5.1.1	Identification of suitable certification programs for Angolan products	Number of mapped programmes	AIPEX (Angolan Private Investment and Export Promotion Agency)	
	5.1.2	Selecting certification programmes	Number of selected programmes	AIPEX	
	5.1.3	Listing certification requirements	List completed	AIPEX	
5.2 Certification local training	5.2.1	Training of producers and/or cooperatives	Number of certified producers/cooperatives	National government	
	5.2.2	Creation of a certification bureau	Number of certification requests Number of certificates awarded	National government	
	5.2.3	Creation of a financial lines for certification	Number of approved contracts	National government Banks	

This outcome is an attempt to enable targeted strategies, which were perceived by the participants of the workshop as pivotal for the development of local green products. From this exercise two important outputs are identified as follow:

- 1. A list of effective governing bodies that are already set up and functioning at national and regional levels; and
- 2. Potential coordinating actions that can be used to guide new legal frameworks and strategic plans established by the national government in the target regions.

# Timeline: Actions and Desired Results

Term	Action	Desired Results	
Short-term	Fostering the development of cooperatives, especially in the fruit sector.	Cooperatives can improve production systems, profit margins, and boost local development.	
	Encouraging actors within the value chain to identify specific nodes and specialize at that to develop programmes of activities towards building strong clusters across the value chain.	With specialization, local needs assessment becomes easier especially where functions and weaknesses are identified.	
	Initiating efforts to reduce the subsidy /grants mentality.	Producers and other actors within the value chain take up an active role in developing themselves rather than waiting to be developed	
	Mapping niche products such as cacao	Development of niche green products could bring local development if included certification for its quality, organic characteristics, and fair-trade production.	
. Medium-term	Encouraging collective planning, thinking and experience sharing among development partners to identify thematic guidelines for designing and implementing programmes in the sub-sector.	Development partners reading from the same page and designing programmes of work based on accepted criteria and thematic guidelines.	
	Developing medium- term programmes of work that seek to address the challenges highlighted herein. Based on the value chain framework develop interventions and activities for each hierarchy of the value chain.	Value chain specific programmes of work are formulated with specific activities targeting all hierarchies of the value chain	
	Working with financial institutions (commercial banks and others) to explore ways of mitigating risks in lending and to get their production as a commercially viable enterprise	Financial institutions appreciate local green products as a commercially viable and profitable business enterprise Risk mitigation strategies and opportunities are identified and explored towards providing market- based credit facilities to green products value chain actors especially at the production function where they are deficient	
Long-term	Building the capacities of every actor to position themselves adequately to enhance effectiveness and efficiency within their areas of influence	Producers appreciate green products as a business enterprise (they keep records, maintain bank accounts, and have their capacities build on business set-up and management). Cooperatives are strengthened to offer more services to members and their operations are streamlined. Synergetic linkages are built within actors to facilitate better relations, trust building and increased efficiency. Programmes focus also on qualitative indicators of change not too much dependence on the quantitative.	



Third Training Workshop

# **National Green Export Review** (NGER) of Angola: **Coffee and Tropical Fruits**

Uíge, 25-29 November 2019

More information:

https://unctad.org/meeting/nger-training-workshop-coffee-and-tropicalfruits-uige-province-angola-workshop-de-formacao

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