# Quality for Competitiveness Reducing Quality Gaps of Regional SMEs in Colombia

## The Colombian experience of setting up new projects to address food safety in Colombia

Paris, Friday October 18th, 2019



















This is a Cooperation Project between the European Union and the Ministry of Trade, Industry, and Tourism of Colombia.

The main aim is to improve the metrological and quality capacities in SMEs from two value chains (cocoa and avocado).

The National German Metrology Institute (PTB), supported by INM and Icontec in Colombia, are responsible for the project implementation













#### **Log Frame**



To improve technical and metrological competencies of public and private entities (SME), with the aim to increase the level of compliance with standards and technical regulations associated with sustainable trade

To <u>identify the quality needs</u> in two value chains of the prioritized regions

5 actions lines which will be implemented in 21 months until 2021

> Funding: Close to €2 million

- To <u>transfer good practices</u> for the use of standards and measurements to SME in the prioritized regions and value chains
- To develop and to improve technical capacities of private and public calibration and testing laboratories that offer services to the prioritized regions
- To develop and to improve the <u>metrological capacities of the INM</u> based on the needs of the prioritized regions and value chains
- To develop a <u>policy dialogue</u> in quality based on a network









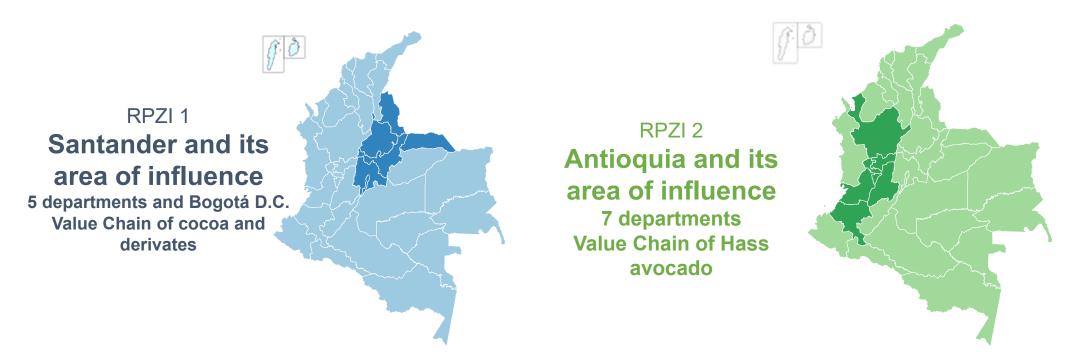






Purpose of the project: Improved technical and metrological competencies of public and private entities (SME), with the aim to increase the level of compliance with standards and technical regulations associated with sustainable trade

Two regions have been prioritized, taking into account their areas of influence (RPZI). In those regions, the Project will look at generating local capacity building related to quality, focused on metrology



The prioritized regions are related to the departments which contribute to the biggest rates of production of the product

Areas of influence are associated with the departments which produce and transform the product from the value chain prioritized













#### Why Cocoa?

- Colombia is the 3rd largest producer of fine and aromatic cocoa (Ecuador 1st and Peru 2nd) worldwide, and shares its biological center of origin.
- Colombian production is expected to grow in regions in which the Peace process took place
- The demand for cocoa is not satisfied worldwide.
- European Regulation reduced the maximum limit of cadmium in cocoa beans to be applied since January, 2019
- Experience in metrology in other products (milk, rice, wheat, liver) can be extended to Cocoa beans
  - Studies of homogeneity and stability
  - Method of measurement ICPMS and GFAA
  - Proficiency Test















### Why Avocado (Hass)?

 Colombian second export fruit is Avocado (Banana is 1st and Physalis Peruviana 3rd) and production hectares and production growth is above average.



- Avocado is considered a superfood and demand is growing worldwide.
- Europe and North America have strict safety regulation
- Chemical metrology experience in other fruits can be extended to Avocado
  - Trained researcher in pesticides traces measurement
  - A comparison item produced in a passiflora fruit (gulupa)
  - Reference material produced in pineapple













Action line



To develop and to improve the metrological capacities of the INM based on the needs of the prioritized regions and value chains

#### **New services initially considered by INM**

Type of measurements	Cocoa and derivates	Avocado
Physical	Mass (Improved): This is transversal for both value chains. The improvements are associated with the methods of measurement: Alternative method of calibration for low capacity weighing	<ul><li>3. Hardness (New): Development of a method of measurement</li><li>4. Percentage moisture content</li></ul>
metrology	instruments	(percentage of dry matter) (New): development of guidelines by
	2. Temperature (Improved): measurement using Reference Materials (Indium Fixed Point Cell)	consensus
	Cadmium (New): Implementation of primary method (isotope dilution)	<ul><li>3. Pesticides (New): Development of a multi-residue method</li><li>4. Total fat (New): Development of a</li></ul>
Chemical metrology	2. Essential elements in cocoa (Iron, Zinc, Calcium) (New): Development of new reference material for proficiency Test	method of measurement







#### Implementing process

2019



Delivered

Making an inception report

First session
Project Management Unit (PMU)

Approved

- ✓ Operative Manual
- ✓ Communication Plan
- ✓ Working Plan First year

PTB Mission

Publication of 20 candidates
First Bank of Evaluators in
Metrological Capacities in Colombia

First sesión Directive Committee

May 22

Project Launched

PTB Mission

June 17

July 17

First Technical Committee

Selection first international expert MinCIT- PTB- INM August 14 August 17

Sept 4

Proposal

Sept 6

Policy Dialogue

Sept Sept 26 30

October 22

**Technical Committee 2** 

Selection of National and International Experts for both value chains Action Line 1

Launching the first closed call for the INM

Development of the Study on Quality Needs in both value chains, including the Actions Plan

**Planning Regional Missions** 

Awareness with the main actors of two value chains







































#### Challenges

- To maintain interest and confidence on the quality infrastructure by policy makers, producers and exporters.
- To extend the interest for metrology to locally consumed products.
- To implement primary methods for ensuring metrological traceability.
- To produce reference material for a Proficiency Test.
- To extend to other pesticides or metals.
- To complete studies of homogeneity and stability.
- To complete a method for preparing RM















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## Project in Media



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