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.

1. To identify the quality needs in two value chains of the prioritized regions

2. To transfer good practices for the use of standards and measurements to SME in the prioritized regions and value chains

3. To develop and to improve technical capacities of private and public calibration and testing laboratories that offer services to the prioritized regions

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

5. To develop a policy dialogue in quality based on a network

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

Funding: Close to €2 million
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.

RPZI 1
Santander and its area of influence
5 departments and Bogotá D.C.
Value Chain of cocoa and derivates

RPZI 2
Antioquia and its area of influence
7 departments
Value Chain of Hass avocado

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 4

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

<table>
<thead>
<tr>
<th>Type of measurements</th>
<th>Cocoa and derivates</th>
<th>Avocado</th>
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<tbody>
<tr>
<td><strong>Physical metrology</strong></td>
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<tr>
<td>1. <strong>Mass (Improved):</strong> This is transversal for both value chains. The improvements are associated with the methods of measurement: Alternative method of calibration for low capacity weighing instruments</td>
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<td>2. <strong>Temperature (Improved):</strong> measurement using Reference Materials (Indium Fixed Point Cell)</td>
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<td><strong>Chemical metrology</strong></td>
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<tr>
<td>1. <strong>Cadmium (New):</strong> Implementation of primary method (isotope dilution)</td>
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<td>2. <strong>Essential elements in cocoa (Iron, Zinc, Calcium) (New):</strong> Development of new reference material for proficiency Test</td>
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<td>3. <strong>Hardness (New):</strong> Development of a method of measurement</td>
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<td>4. <strong>Percentage moisture content (percentage of dry matter) (New):</strong> development of guidelines by consensus</td>
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<td>3. <strong>Pesticides (New):</strong> Development of a multi-residue method</td>
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<tr>
<td>4. <strong>Total fat (New):</strong> Development of a method of measurement</td>
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Implementing process

2019

First session
Project Management Unit (PMU)

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

Policy Dialogue Proposal

First sesión
Directive Committee

Making an inception report

May 22
Project Launched

June 17
Delivered

July 17
First Technical Committee
Selection first international expert
MinCIT- PTB- INM

August 14
PTB Mission

August 17

Technical Committee 2
Selection of National and International Experts for both value chains
Action Line 1

Sept 4

Sept 6

Sept 26

Sept 30

October 22

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

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
Project in Media

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