

## Market Access Upgrade Programme (MARKUP II)

### Annex A

#### TERMS OF REFERENCE

<b>Event name:</b>	Training on implementation of analytical methods for pesticide analysis for the testing laboratory of the National Agricultural Export Development Board (NAEB) using Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS).
<b>Date:</b>	April- August 2025
<b>Location:</b>	Kigali, Rwanda
<b>Organised under activity</b> <i>(internal for ITC):</i>	(SEC) Quality and standards 1.2.3. – Rwanda Strengthen the testing capacity of the testing laboratory of the National Agricultural Export Development Board (NAEB) to better support the targeted sectors
<b>WBSE</b> <i>(internal for ITC)</i>	SB-023855.02.07
<b>Type of services required:</b>	3-week training and capacity building on implementation of analytical methods for pesticide analysis using LC-MS/MS to cover at least 250 pesticides Procurement of standards, chemicals and consumables needed for implementation of the methods

#### BACKGROUND

The Market Access Upgrade Programme (MARKUP II) is funded by the European Union (EU) and runs from 2023-2027. With a view to contribute to economic development in the East African Community (EAC) through increased sustainable intra-African and EU-Africa trade, MARKUP II has been designed to improve livelihoods, employment, export competitiveness for MSMEs and economic growth in Africa through supporting the development and strengthening of key export-oriented priority value chains with high potential. The programme covers interventions in Burundi, Kenya, Rwanda, South Sudan, Tanzania and Uganda through the provisions of partnerships with national, regional and international institutions.

Within the framework of Activity 1.2.3 “Strengthen border inspection capacities, and support critical National Quality Infrastructure, possibly in direct benefit mainly of target value chains”, ITC supports the strengthening of the capacity of the testing laboratory-Specialised Export Quality Infrastructure (SEQI) of the National Agricultural Export Development Board (NAEB) to better support the targeted sectors (namely in Rwanda: avocado, coffee, French beans, horticultural products). In line with NAEB priorities, in 2024 MARKUP II conducted three-week on-site training and strengthened the knowledge and capacity of SEQUI laboratory technicians on principles of mass spectrometry and to implement a series of analytical methods for pesticide analysis (approx. 60 pesticides residues) using GC MS system for target MARKUP II products. During the training samples of maize, apple, and tomato were analysed. The integration of other advanced techniques available in the SEQUI

laboratory, such as **Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS)**, further amplifies the analytical potential. LC-MS/MS offers superior sensitivity and specificity, allowing for the detection of a broader spectrum of pesticide residues, including those that may be present at trace levels. This capability is crucial for ensuring comprehensive safety assessments of food products, especially given the complex matrices associated with crops like **avocado, coffee, cocoa, and French beans**.

These terms of reference (TORs) concern the procurement of a specialised service to enable SEQI/NAEB physico-chemistry laboratory to expand the scope of implementing pesticides analysis (a minimum of 250 pesticides) on LC-MS/MS system (Agilent technologies) as routine work by building on previous assistance. It will include training and capacity building at SEQI/NAEB to implement a series of analytical methods for pesticide analysis using LC MS/MS system for target MARKUP II products (coffee, avocado and horticultural products) on routine work. The service will include procurement of standards, chemicals, consumables needed for the implementation of the methods including reference materials, columns, solvents, etc.

## 1. TECHNICAL SPECIFICATIONS

The service provider is responsible for the following:

Deliverables and timeframe:

Sn	Deliverables	Description	Timeline
1	Deliverable 1	<p>Programme of the 3-week mission with training programme agreed with ITC and NAEB management including the list of pesticides of relevance to MARKUP II target products (e.g. avocado, coffee, French beans, horticultural products) to be analysed. Training programme shall include:</p> <ul style="list-style-type: none"> <li>• Basic training on the instrumentation – operation and maintenance</li> <li>• Advanced training on instrumentation – data analysis and reporting</li> <li>• Sample preparation protocols</li> <li>• Implementation of acquisition methods – setting up parameters</li> <li>• Method verification and validation – data collecting and creation of protocols for method validation and measurement uncertainty</li> <li>• Training of NAEB personnel for routine work</li> <li>• Routine maintenance of the equipment and troubleshooting by the equipment users</li> </ul>	(by 20 April 2025)
	Deliverable 2	Procurement of necessary standards, micropipettes for standards preparation, chemicals and consumables reference materials, solvents, QuEChERS extraction and dispersion kits, SPE columns, syringe filters, tips, filter papers for mobile phase filtration, glass filtration assemblies and vials for at least 500 samples to be delivered to NAEB (Kigali, Rwanda) prior to conduct the training	(May - June 2025)
2	Deliverable 3	Three-week training and capacity building successfully completed with NAEB SEQI staff	(July)

		enabled to conduct ongoing analysis of at least 250 pesticides on LC-MS/MS system for coffee, tea, avocado and other horticulture product	
3	Deliverable 4	Report on the training and capacity building cleared by ITC. Report shall include training programmes, list of trained personnel, activities and results, evaluation of the competences of the lab personnel prior and after the training, evaluation of the training by trained personnel, recommendations and way forward for NAEB/SEQI lab to sustain the capacity of analysing pesticides. All documentation produced, procedures, list of consumable and standards procured to be annexed to the report	by 30 July 2025
4	Deliverable 5	After training off-site support to SEQI staff after the training in case of need of technical support to run the equipment	August 2025

### Expertise:

The service provider is required to assign expert(s):

- Who have at least a first degree in science or related subject
- who have previously trained NAEB /SEQI lab personnel on pesticides analysis
- with a combination of at least 5 years in training and capacity building and analytical expertise in similar field
- with experience in running laboratory using LC MS/MS Agilent technology"
- with advanced level of English

## 1. QUALIFICATIONS, COMPETENCIES AND EXPERIENCE REQUIRED

The bidder is required to have the following competencies/experience:

- At least 5 years of proven previous experience in analysing pesticides using LC MS/MS a
- A track record of providing training and capacity-building services in this are in laboratory settings
- Excellent oral and written communication skills in English
- Ability to keep tight deadlines.
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- Capability to procure and supply laboratory consumables and standards to Kigali, RwandaCan apply principles of adult learning to training development and delivery.
- Understands individual and cultural differences (e.g., gender, immigration, culture, age, and professional status) can impact learning preferences and should be considered when developing strategies to meet those needs.
- Promotes understanding and retention by providing participants repeated and varied opportunities to engage with content/material (ex., uses auditory and visual stimuli, educational presentation, opportunities to engage in discussions, application exercises through behavioural and experiential activities).
- Uses experiential and interactive training techniques to create opportunities to practice the learning experience.

The bidders are required to provide proof of the above.

## 2. CONTENT OF THE PROPOSAL

## I. Technical offer

The bidder must submit proposal that contains the following information:

- Company/organisation description including company legal name, legal form, full address (including country), contact name and e-mail address for this tender, name, title and e-mail address of the person authorised to sign contracts, UNGM registration id (6 digit), size, number of employees
- The ITC's General Terms and Conditions (UN conditions of contract) dated and signed to confirm acceptance (**Annex D**)
- Copy of the registration certificate
- Description and track record of the bidder's experience in developing trainings on professional/soft skills including references
- References of past contracts for delivery of similar services
- Composition of the team for this assignment and assignment of tasks or activities to the team members
- CVs of the assigned team members
- Provision of the list of the necessary standards, chemicals and consumables needed for implementation of the methods including reference materials, solvents, QuECHERS extraction and dispersion kits, syringe filters and vials
- Tentative work plan and strategy proposed

## II. Financial offer

Please submit a financial offer separate from the technical offer. For that please fill in, date, and sign the spreadsheet of **Annex C** attached to provide a price detailed by deliverable. Please also attached to **Annex C** a more detailed offer itemized by cost component for each deliverable.

The price quoted should be a fixed price, including all the services as specified in this TOR and as proposed by the Training Service Provider.

Your offer should remain valid for a period of 180 days following the tender closing date.

## 3. EVALUATION OF PROPOSALS

ITC will only consider the bids that have passed the mandatory preliminary criteria:

- Acceptance of United Nations General Terms and Conditions (Annex D);
  - The company/organisation is registered in UNGM and has provided the 6 digits UNGM vendor id
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- Each proposal will be assessed first on its technical merits and subsequently on the financial proposal provided. In making the final decision, ITC considers both technical and financial aspects. ITC first reviews the technical aspect of the offer, followed by the review of the financial offer of the technically compliant vendors.
  - The technical offer must cover all aspects and tasks required in the description of main tasks as specified above and provide all the information needed. Offers not fulfilling the requirements or deviating from them may be rejected from the selection process. Any technical proposal must include all of the specifications/criteria and evidence described in the next sections.

- Offers not fulfilling the requirements or deviating from them may be rejected from the selection process.

ITC will then select the most economically advantageous offer among the technically compliant offers.

Awards are given based on the “lowest-priced, technically acceptable offer” evaluation methodology.

#### 4. TERMS OF PAYMENT & PAYMENT SCHEDULE

ITC will only make payment based on satisfactory achievement of specific deliverables. Also note that ITC does not make advance payment.

As per ITC/UN standard terms of payment, payment is at 30 days following satisfactory delivery of the services and invoice receipt.

The payment schedule will be as follows:

- 50% advance upon submission of signed contract; and
- 50% after completion of the assignment and submission of the final report

#### 5. PROCUREMENT TIMELINE

Activity Description	Expected deadline
Publication of the tender	18 March 2025
Submission of clarification questions and publication of the answers	18 March 2025 (i.e., to submit questions) 25 March 2025 (i.e., to receive answers from ITC)
Submission of offers deadline	27 March 2025
ITC evaluation & award notification	27 March – 01 April 2025 (i.e., ITC evaluation and award notification)
Contract issuance and signature	Mid-April 2025
Expected start of contract	Will be notified by Programme Manager asap