## Coffee Quality and Export Certification Laboratory Trade Infrastructure for Export Scheme (TIES)



### LIST OF SERVICES

COFFEE QUALITY DIVISION
COFFEE BOARD
NO.1, DR.BR.AMBEDKAR VEEDHI
BENGALURU





Coffee is one of the most widely traded agricultural commodities in the world and India accounts for about 4.56 percent of world coffee production. The Coffee Board of India (Ministry of Commerce and Industry, Govt. of India) is a statutory organization functioning for development of the Indian coffee sector. About 75 per cent of the total coffee produced in the country is exported to over 88 countries of the world. In India Coffee not only plays a crucial role in the livelihoods of many people in rural area but also coffee contributes significantly to the foreign exchange earnings. The main goal of the laboratories is to support the entire coffee sector with special emphasis on export.

### Objectives of the Laboratories established under TIES:



To provide reliable, consistent and efficient coffee testing service using state-ofthe-art instruments with competent qualified and experienced manpower.



To perform analysis of coffee for export as per present national requirement and international standards.



To provide testing services to coffee processing units for monitoring the quality of coffee for export and domestic market.



To support coffee exporters for clearing custom points by providing testing reports on the quality parameters prescribed by the importing country.



To strengthen the export certification process.



To ensure the quality of coffee during its import from other countries.





the State-of-the-Art laboratory facility exclusively for testing Coffee and Coffee products



a Centralized testing laboratory facilitating all the stakeholders of the Coffee Value Chain for ensuring the Quality of Coffee.

The
Laboratories at
Coffee Quality
Division is....



adopting beneficial high-end technologies for analysis of various parameters on testing Coffee for exporters as required by the importing countries.



Offering testing facility for the exporters of Coffee in all forms such as green coffee, roaster bean, R&G coffee, instant coffee etc

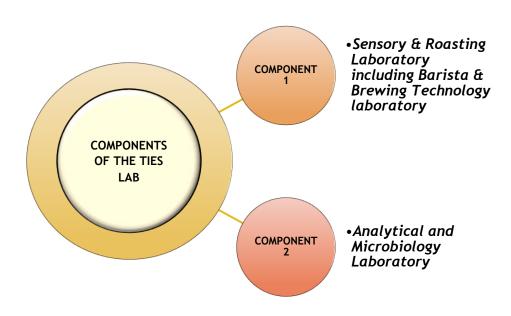


Offering testing facility for importers to realize the acceptability of the coffee for domestic use or for re-export.



Offering testing facility for coffee planters, curers, roasters and every process through-out the value chain for the overall improvement of quality of coffee which will be able to meet the export standards.

### Components of the Laboratories:





### Component I – Sensory and Roasting Laboratory

A key opportunity in increasing coffee exports lies in improving quality. The main purpose of the Sensory and Roasting Laboratory is to analyze the cup quality of the coffees which has a vital role in deciding the overall quality of the coffee. Therefore it is mandatory to have a state of art laboratory for Sensory and Roasting laboratory. The main mandate of this laboratory is to provide a Quality Evaluation Report as per the national and international format for the coffees for export and domestic market. A feedback report on the improvement of quality aspects of coffee will also be helpful to coffee farmers for gaining the exportability of the product.



The laboratory is equipped with a distinctively designed cupping tables for the organoleptic analysis of coffee and the results of the analysis is provided with updates score cards with descriptions and meticulously scored ratings. In addition to that, the laboratory is equipped with state-of-the art instruments such as e-nose, e-tongue, Coffee particle size analyser, Pycnometer, Agtron Roast Color Analyser, Water Activity meter, O2/CO2 Analyser, Sinar moisture meter, Viscometer and Refractometer.





Electronic Nose







The Barista and Brewing Technology Module of the laboratory is designed with world class standards and equipped with latest models of espresso machines, grinders and major brewing equipment.





### Component II – Analytical and Microbiology Laboratory

The most vital component, since the quality issues regarding health aspects such as mycotoxins, pesticide residues, heavy metal contamination has gained great significance in the export of coffee commodity. So the main mandate of Analytical laboratory is creation of database on various contaminants and for assisting research programmes on quality profile of coffee. Analytical laboratory provides facilities for analyzing different PFA parameters like moisture content, water soluble matter, acidity, ash content, caffeine using ISO standards. Based on different quality parameter of coffee analyzed at analytical laboratory, certificate can be produced to coffee growers for the easy accessibility of Indian coffee to international market.

**Analytical lab module** is equipped with high-end equipment such as LC-MSMS, GC-MSMS, ICPMS, HPLC, Water purification system, Kjeldahl and Soxhlet units and other basic laboratory equipment.



Liquid Chromatography Mass Spectroscopy Mass Spectroscopy (LCMSMS)



Gas Chromatography Mass Spectroscopy Mass Spectroscopy (GCMSMS)



Inductively Coupled Plasma Mass Spectroscopy (ICPMS)





High performance Liquid Chromatography (HPLC)

Soxhlet and Kjeldahl Units



Microbiology lab module is equipped with high-end equipment such as Pathogen Screening and identification systems, Biosafety cabinets, Microplate reader, BOD incubator and other basic laboratory equipment.



Automatic Pathogen Screening and Identification system





# List of services offered by Analytical and microbiology laboratory established under trade infrastructure for export scheme

Sl.no.	Type of Service	Service Standards	Service Charges* (₹.per sample) excluding GST@ 18%
1.	Green Beans – Moisture estimation by gravimetric method	4 working days after receipt of samples	Rs.400/-
2.	Moisture Meter Calibration (Sinar, Digital)	2 working days after receipt of the moisture meter	Rs.1000/-
3.	FSSAI Parameters for R & G Coffee	6 working days after receipt of samples	Rs.4300/-
4.	FSSAI Parameters for R & G Coffee blended with Chicory	6 working days after receipt of samples	Rs.3350/-
5.	FSSAI Parameters for Pure Soluble Coffee	6 working days after receipt of samples	Rs.2850/-
6.	FSSAI Parameters for Pure Soluble Coffee blended with Chicory	6 working days after receipt of samples	Rs.2850/-
7.	Ochratoxin–A estimation in coffee samples	15 working days after receipt of samples	Rs.4600/-
8.	Green Beans – Pesticide Residue Analysis (per Compound)	15 working days after receipt of samples	Rs.1300/-
9.	Green Beans and Roasted beans Heavy metal analysis (per compound)	15 working days after receipt of samples	Rs.1300/-
10.	Parameters prescribed for Nutritional composition of R & G and soluble coffee powder.	15 working days after receipt of samples	Rs. 6000/-

<sup>\*</sup> GST @18% shall be paid extra

### Instruction for sample submission for analysis at Analytical and Microbiology laboratory:

Minimum Quantity of Sample Required:

- 250 g of Green Coffee/ Roasted Coffee bean/Roasted and Ground Coffee
- 100 g of Instant Coffee





## List of services offered by Sensory and Roasting laboratory established under trade infrastructure for export scheme

Sl. No.	Types of Service	Service standards	Service Charges* (₹.per sample) excluding GST@ 18%
1.	Analysis of moisture content	3 working days after receipt of samples	100/-
2.	Physical Analysis	3 working days after receipt of samples	250/-
3.	Cup Tasting	3 working days after receipt of samples	250/-
4.	Cup Tasting plus Physical Analysis	5 working days after receipt of samples	500/-
5.	Cup Quality Analysis of R&G coffee blends	3 working days after receipt of samples	750/-
6.	Cup Quality Analysis of Espresso blends	3 working days after receipt of samples	750/-
7.	Cup Quality Analysis of Instant coffee	3 working days after receipt of samples	500/-
8.	Water Activity (a <sub>w</sub> )	3 working days after receipt of samples	300/-
9.	Analysis of O2/CO2 in Coffee packages for shelf life study	3 working days after receipt of samples	300/-
10.	Analysis of Roast Color of Coffee powder and Bean	3 working days after receipt of samples	500/-
11.	Particle size distribution for R & G and Instant Coffee	3 working days after receipt of samples	1200/-
14.	Density Analysis	3 working days after receipt of samples	1000/-
15.	Brix Value	3 working days after receipt of samples	300/-
12.	Aromatic profile of Coffee using electronic nose	5 working days after receipt of samples	5000/-
13.	Taste profile of Coffee using electronic nose	5 working days after receipt of samples	2500/-

<sup>\*</sup> GST @18% shall be paid extra



### Instruction for sample submission for analysis at Sensory and Roasting laboratory:

- Minimum Quantity of Sample Required: 350 g of Clean Coffee, 350g of Roasted Coffee bean, 300 g Roasted and Ground Coffee, 50 g of Instant Coffee, 3 numbers of liquid Coffee sachets.
- 2. Cherry and Parchment Coffee: Minimum 2 kg and Rs.250/- extra for hulling/peeling/polishing

### Mode of Payment:

The mode of payment is through online transfer to the below mentioned account and the transaction details along with GST details if applicable should be sent to the contact details mentioned for the respective laboratories.

#### Account details:

Name of the Account: COFFEE BOARD IEBR ACCOUNT - GENERAL FUND STATE BANK OF INDIA

AC.NO - 64015049024

IFSC - SBIN0040022

SBI, Dr.Ambedkar Veedhi,

Bengaluru.

Coffee Board GST No. 29AAAJC0174B2ZR

### **Laboratory Contact:**

#### Sensory and Roasting Laboratory:

Dr.Ramya.M, Subject Matter Specialist, Coffee Quality

Ramya.coffeeboard@gmail.com, drmramya.cbd@gov.in

Contact No. +91 94494 69337

Dr.Mandappa. I.M, Subject Matter Specialist, Coffee Quality

mandappa.coffeeboard@gmail.com

Contact No. +91 94497 15489

#### Analytical and Microbiology Laboratory:

Dr. Tiluttama Mudoi, Analytical chemist tiluttamamudoi@yahoo.co.in
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Dr.Mandappa. I.M, Subject Matter Specialist, Coffee Quality mandappa.coffeeboard@gmail.com
Contact No. +91 94497 15489





# India www.indiacoffee.org

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