Multiple-Approach Method for Sensory Panel Training in Producing Countries

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SUMMARY

Training stakeholders in the coffee supply chain in sensory and physical characterization is an asset for adding value to coffees and CIRAD has developed a training method for that purpose. The aim of sensory panel training method is to give in a same time a global vision of the coffee quality. Various theoretical, practical and cultural approaches are linked with sensory analysis. The participants of these training come from various mediums and their knowledge is often different. It is necessary to adapt the training to public targeted. This method is evolutionary and allows an adaptation to all situations, all publics.

INTRODUCTION

Cirad experts have developed a method for training stakeholders in the coffee commodity sector on the physical and sensory characterization of coffee. This method is based on experience and on the following ISO standards: ISO 8586 (General guidance for the selection, training and monitoring of assessors), ISO 13299 (General guidance for establishing a sensory profile), ISO 6658 (Methodology – General guidance), ISO 10470 (Defect reference chart).

TRAINING GOALS

The trainees have:

- To be able to make an overall assessment of a coffee product,
- To understand how coffee preparation steps influence the coffee’s ultimate sensory and physical features,
- To learn how to assess the typical character of coffee.
This method is presented in several languages on the CD-ROM (2009).

Figure 1. Training session in Kintamani Bali.

A SERIES OF TRAINING APPROACHES

The complementarity of the modules means that training can be adapted to the knowledge of each audience: participant, group, or research project.

- A theoretical approach (involving slide shows presenting the different stages in green coffee preparation) presents the different steps in market coffee preparation,
- A practical, explanatory and demonstrative approach that is related to the sensory test results,
- A cultural approach enables trainees to consider quality in terms of key evaluation criteria in different countries.

LEARNING TOOLS

Panoply of teaching tools has been developed. It includes entertaining tests that create group dynamics and encourage discussions between the participants (knowledge and experiences).

- Participative tests that promote experience exchanges between trainees,
- Blind tasting of coffee from participating countries, different origins, and the market,
- Taste bud map (Figures 1 and 2): each trainee locates his/her taste buds. Distinction between taste and flavour, and the practice of inhalation during sensory assessment,
- Slide show, theoretical courses, practical applications.
A THREE-STEP PROCESS

Training is organized in such a way as to create progressive dynamics.

First step

- Training gain awareness on their ability to indentify basic tastes and on discussing coffee. They learn to work in a team setting.
Figure 2. Working group creation

Second step

- Trainees enhance their sensory assessment skills,
- They learn about coffee assessment terminology,
- Taste panel members are selected at the end of the second step.

Third step

- Trainees gain greater insight on the following topics: sensory analysis, harvesting and postharvest technology, green coffee sampling, coffee storage, main defects of green coffees, grain-size distribution, roasting, coffee preparation for the sensorial analysis, and tasting methods.
- The acquired knowledge is related to organoleptic coffee traits. For instance, identifying physical defects in coffee is linked with postharvest treatment, and defective coffees are tested before and after sorting, and a link is made with each sensory descriptor.

CONCLUSION

By the end of this training, participants are able to make an overall judgment of a coffee. They understand the effects of the different coffee preparation stages (from field to cup). They possess the necessary tools to assess the typicity of their coffee. Regular practice is required to maintain the knowledge acquired.

The main aspects of the method are:

- An innovative method,
- Complementary of training modules,
- Tailored for other products,
- Tailored for different target groups (researchers, local stakeholders, extension agents, funding agencies, etc…).

An educational CD-ROM has been created for that purpose and is currently being improved and translated. It should be available in 2009 and will then be proposed during training sessions.