









Abstract

Enhancing Competitiveness of Coffee Growers in Ituango, Colombia, through Science, Technology, and Innovation: “The Coffee Grower’s Laboratory Initiative” †

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† Presented at the International Coffee Convention 2024, Mannheim, Germany, 17–18 October 2024.



Citation: Martínez-Castaño, M.; Pérez-Pérez, L.E.; Gómez-Quintero, D.J.; Gallardo-Cabrera, C.; Rojas-Gallardo, J.; Quirama-Rivera, M.A.; Sánchez-Betancur, G.; Zapata-Uribe, E.A.; Posso-Carvajal, C.P.; Tabares-Guevara, D.M.; et al. Enhancing Competitiveness of Coffee Growers in Ituango, Colombia, through Science, Technology, and Innovation: “The Coffee Grower’s Laboratory Initiative”. *Proceedings* **2024**, *109*, 24. <https://doi.org/10.3390/ICC2024-18024>

Academic Editor: Dirk W. Lachenmeier

Published: 2 July 2024



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Abstract: Different actors have observed divergences and imbalances related to quality understanding and value appropriation in the coffee value chain. Reducing this gap and ensuring sustainability requires innovative strategies. The “Coffee Grower’s Laboratory” in Ituango, Colombia, was established to enhance local coffee farmers’ capacities in science, technology, and innovation. Over 13 participatory methodologies were developed with design thinking to facilitate knowledge exchange between the farmers’ traditional expressions and international commercial practices. Key methodologies included brand co-creation (Artesanato), roast curves (Anatomy of Roasting), roaster operation (The Roaster’s Journey), understanding beans (Know the Bean), and coffee tasting (Deliciousometer). Additionally, methodologies for strengthening intra and interpersonal skills, such as self-care (Crossing the River) and empowerment (The Four Pillars of Trust), were included. Altogether 302 coffee farmers participated. We co-created a community brand, Itucafé, promoted on social media to highlight the farmers’ traditions and innovations nationally and internationally. Farmers, who previously sold only washed parchment coffee, now process, taste, and sell their coffee directly to buyers. Selling directly to buyers increased coffee growers’ profits to around 50% through the “Coffee Grower’s Laboratory”, compared to the less than 10% they earned previously. They also experiment with new fermentations using local fruits, creating unique sensory profiles for more competitive pricing. The “Coffee Grower’s Laboratory” has strengthened the coffee community’s capabilities and competitiveness, enhancing the visibility and recognition of Ituango coffee. It provides an ideal environment for continuous training and producer-buyer relationships, serving as a replicable model for other coffee-producing regions in Colombia.

Keywords: coffee value chain; transformation techniques; coffee quality; economic sustainability; direct relationships

Supplementary Materials: The following supporting information can be downloaded at: <https://www.mdpi.com/article/10.3390/ICC2024-18024/s1>, Presentation S1: Enhancing Competitiveness of Coffee Growers in Ituango, Colombia, through Science, Technology, and Innovation: “The Coffee Grower’s Laboratory Initiative”.

Author Contributions: Conceptualization and acquisition of resources: C.G.-C. and M.M.-C.; methodologies, entry, data curation and research: C.G.-C., M.M.-C., L.E.P.-P., M.A.Q.-R., G.S.-B., D.J.G.-Q., C.P.P.-C., E.A.Z.-U. and J.C.L.-I.; Resources: M.M.-C., L.E.P.-P., D.J.G.-Q., C.P.P.-C., E.A.Z.-U., M.A.Q.-R., G.S.-B., A.J.T.-A., J.C.Z.-S., J.C.L.-I. and J.R.-G.; writing and preparing the original draft, writing, revising and editing: C.G.-C., M.M.-C., L.E.P.-P. and D.J.G.-Q.; visualization: M.M.-C. and J.R.-G.; project supervision and administration: C.G.-C. and D.M.T.-G. All authors have read and agreed to the published version of the manuscript.

Funding: This project was funded by the Ministry of Science, Technology, and Innovation of Colombia under the funding number BPIN 202000010030, which aims to foster a culture that values and manages knowledge and innovation as a foundation for the sustainability of global chains.

Institutional Review Board Statement: The study was conducted in accordance with the Declaration of Helsinki, and approved by the Institutional Ethics Committee of University of Antioquia (protocol code 19-99-868 and date of approval was 18 September 2019).

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: We would like to first express our sincerest gratitude to the rural population who actively participated, offering their time, knowledge, and experiences, which were essential to the success of this work. We also deeply thank the organization APROCANT for their commitment and invaluable organizational efforts.

Conflicts of Interest: The authors declare no conflicts of interest.

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