

Abstract

Food Security Opportunities from Plant to Coffee Cup [†]

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[†] Presented at the International Coffee Convention 2023, Mannheim, Germany, 30 September–3 October 2023.

Abstract: Food insecurity and malnutrition, in a scenario further complicated by the enduring effects of the COVID-19 pandemic and the Ukraine War, are global priorities. The affordability of healthy diets, which determines food security and nutrition indicators, is a tremendous challenge to be solved by the transformation of food systems into sustainable ones. The coffee industry is being transformed to contribute to end hunger, food insecurity and malnutrition in all its forms and to achieve affordable healthy diets for all. For achieving these goals, the policy of the coffee system for its effective transformation should be based on innovation and research. About ninety percent of the coffee cherry is discarded before reaching the cup that we have for breakfast each morning. The “by-products” or waste generated in this process must be valued to increase the sustainability of the coffee industry, in addition to maximizing the benefits for the environment, society and economy. The by-products (cascara, mucilage, parchment, silverskin and spent coffee grounds) can be converted into new products to be incorporated into a healthy daily diet and daily life to enjoy, solve small problems and contribute to making this the first sustainable agricultural product in the world. In this way, it is feasible to achieve a coffee value chain with zero waste, neutral products for the environment and thousands of solutions for the present and future of humanity. As a consequence, in recent decades, a lot of innovation and research have been focused on these global objectives. We present our contribution in this field.

Keywords: coffee; coffee by-products; nutrition security; sustainability; upcycling



Citation: Castillo, M.D.d.; Iriondo-DeHond, A. Food Security Opportunities from Plant to Coffee Cup. *Proceedings* **2023**, *89*, 12. <https://doi.org/10.3390/ICC2023-14829>

Academic Editor: Adriana Farah

Published: 7 August 2023



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Author Contributions: Conceptualization, A.I.-D. and M.D.d.C.; investigation, A.I.-D. and M.D.d.C.; writing—original draft preparation, M.D.d.C.; writing—review and editing, A.I.-D. and M.D.d.C.; supervision, M.D.d.C.; funding acquisition, M.D.d.C. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by the Ministerio de Ciencia e Innovación., grant number PID2019-111510RB-I00.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Not applicable.

Data Availability Statement: Not applicable.

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

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