

Comparing the Sustainability Performance of Certified and Non-certified Coffee Farms in Uganda: Synergies and Trade-offs Between Sustainability Themes

Ssebunya, Brian Robert^{1,2*}; Schader, Christian¹; Baumgart, Lukas¹; Landert, Jan¹; Altenbuchner, Christine²; Schmid, Erwin²; Stolze, Matthias¹

¹*Research Institute of Organic Agriculture (FiBL), Ackerstrasse, CH-5070 Frick, Switzerland*

²*Department of Economics and Social Sciences, University of Natural Resources and Life Sciences (BOKU), Feistmantelstrasse 4, 1180 Vienna, Austria*

*Corresponding Author: brian.ssebunya@fibl.org

Abstract: The Sustainability Assessments of Food and Agriculture Systems (SAFA) framework published by the Food and Agriculture Organisation (FAO) aims at harmonising sustainability assessments and making methods and results more transparent and comparable. There is, however, limited understanding of the interactions between SAFA themes under different agricultural production contexts. Synergistic interactions may allow for simultaneous enhancement of more than one sustainability goal, while conflicts in some sustainability goals might result in trade-offs. In this article: (i) we assess the sustainability performance of certified (organic and fair trade) and non-certified smallholder farms in both Robusta and Arabica coffee production systems in Uganda, employing the indicator-based SAFA-consistent Sustainability Monitoring and Assessment RouTine (SMART) Farm Tool and; (ii) using the respective sustainability scores, we compare synergies and trade-offs between themes using the non-parametric Spearman correlation test. Generally all farms had high scores in the social, followed by environmental, and low in economic and governance themes, irrespective of the certification status. We find that certification improves the sustainability performance of farms, mainly through the enhancement of the ‘cooperative effect’ which ultimately has positive effects on other sustainability dimensions. This was evident among the certified coffee farms which obtained significantly higher scores in all dimensions than the non-certified farms. We thus found more synergies between sustainability themes among certified than non-certified farms. However the extent of the synergies and trade-offs significantly vary with certification type and other contextual factors. These findings call for caution in generalizing certification effects on sustainability of agricultural production systems.

Keywords: SAFA-Guidelines, SMART, Coffee, Organic production, Fair trade, Certification, Uganda