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Do Environmentally-Friendly Cocoa Farms Yield Socio-Economic Co-Benefits?

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Abstract

Chocolate companies are increasingly held accountable for their entire value chains. Thus, they enhance investments in value chain sustainability through third party certification or internal programs. So far, these initiatives have strongly focussed on capacity building for farmers to decrease cocoa farms' environmental impact and increase productivity. The question arises whether this focus on ecological aspects and productivity also has socio-economic co-benefits on farms.

Taking sustainability data from 190 smallholder cocoa farms in Ecuador, we analysed synergies between the environmental and economic dimension as well as social dimension of sustainability. The data was collected using the SMART-Farm Tool, a multi-criteria assessment methodology that assesses farm-level sustainability by operationalizing the FAO Sustainability Assessment of Food and Agriculture Systems (SAFA) Guidelines with 58 sustainability subthemes within the four dimensions of environmental integrity, social well-being, economic resilience, and good governance. We used a Latent Profile Analysis to identify the group of farmers that performed highest (n= 32) and lowest (n=73) across all environmental subthemes, and then compared the groups' performance in the economic and social subthemes using a Wilcoxon test.

Our results indicate significantly higher results ($p < 0.001$) for the high environmental performers compared to the low performers in several subthemes. These include "Internal investment" and "Stability of supply" among the economic, and "Safety and health provision" and "Food sovereignty" among the social subthemes. These synergies exist, given more resource-friendly, diverse production practices, which increase a farm's preparedness for the future as well as food self-sufficiency. The lower use of agro-chemicals reduce the dependency of off-farm inputs and decrease farmers' health and safety risks. Further significant differences included "Community investment" and "Public health". In general, however, we detected far more synergies between the environmental and economic than between the environmental and social dimensions.

These results are important for chocolate companies, which so far have mostly focused on on-farm activities to improve their value chain sustainability. Achieving improvements in farmers' social well-being might require different interventions that go beyond the farm-level and address systemic issues together with different stakeholders.

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