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## Welfare Effects of Coffee Certification: Some Evidence from Nicaragua

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### Abstract

Nicaragua is the second poorest country in Latin America with the production of coffee playing a central role in the economy. In the last years, certification of smallholder cooperatives has been increasingly promoted as an instrument to enhance smallholders' incomes and to satisfy growing worldwide demand for healthier and more socially and environmentally-friendly produced coffees. By applying econometric models to survey data from 233 coffee smallholders in Jinotega Municipality, North-central Nicaragua, this paper empirically shows the impacts of Fairtrade, Organic, and double (Organic and Fairtrade) certification standards against the counterfactual of non-certification on the income of cooperatively organised smallholders. The results show modest positive impacts of both Organic and double certification on smallholders' incomes but no significant income effects of Fairtrade certification. The findings further illustrate that Organic certification has been more effective in denting income poverty among the 'extreme poor' of the cooperatively-organised smallholder coffee farmers in Nicaragua relative to the 'moderately poor', while Fairtrade certification shows no positive impact in this regard. The paper concludes that the current impacts of certification on income poverty of coffee smallholders in Nicaragua are nascent; however, it asserts that certification can contribute to poverty reduction if it is complemented by an efficient and frictionless institutional framework and by other effective development strategies. Beyond smallholders' income, the base of all certification approaches is a strong organisational capacity on the production side, especially when they aim to improve smallholders' livelihoods. However, challenges remain. The first and probably most difficult challenge is the availability and maintenance of strong organisational and infrastructural capacities. The success of certification is often interlinked with capacities of the agricultural cooperative sector in the respective country. Second, certification needs proper monitoring. The effective and regular verification of certification requirements by accredited inspectors is still challenging, not only in remote rural areas of developing countries. Third, certification needs the 'right' concepts and standards to be applied to certain local environments, especially when aiming simultaneously at socio-economic, ecological and health concerns.

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