



www.elsevier.com/locate/worlddev

<http://dx.doi.org/10.1016/j.worlddev.2017.05.021>

Toward Improving the Design of Sustainability Standards—A Gendered Analysis of Farmers' Preferences

EVA-MARIE MEEMKEN^a, PRAKASHAN CHELLATTAN VEETIL^b and MATIN QAIM^{a,*}^a *University of Goettingen, Germany*^b *International Rice Research Institute (IRRI), New Delhi, India*

Summary. — Recently, sustainability standards have gained in importance for export crops produced in developing countries. Several studies analyzed whether such standards deliver on their promise to improve the livelihoods of poor farmers, with mixed results. Here, we ask whether the design of standards could be improved such that farm households benefit more. An assessment of what particular features of standards hamper or facilitate participation requires a better understanding of farmers' preferences. Our contribution is two-fold: First, based on a choice experiment we analyze how farmers evaluate actual and hypothetical features of standards. Data were collected from small-scale coffee producers in Uganda. Second, this is the first quantitative study on standards employing a gendered research design. A gender focus is important, because coffee and other certified export crops are often controlled by men. The choice experiment included features of standards aimed at reducing gender inequality and was conducted separately with male and female members of farm households. Results indicate that farmers have positive attitudes toward sustainability standards in general. While they dislike bans of productivity-enhancing inputs, agricultural training and special female support are appreciated. Many also see requirements that have to be met for certification as a welcome nudge to invest in better farm management and quality upgrading. Female farmers have a higher preference for standards than male farmers. Also within households, significant preference heterogeneity between women and men is found.

© 2017 Elsevier Ltd. All rights reserved.

Key words — choice experiment, farmer preferences, sustainability standards, gender, mixed logit models

1. INTRODUCTION

Recently, sustainability standards and certification schemes have gained in importance for export crops produced in developing countries. Particularly remarkable is the development of the certified coffee sector. The area under certified coffee tripled from about one million to about three million hectares during 2008–13. In 2013, an estimated 30% of the global coffee area was certified under one of the main certification schemes—4C Association, Fairtrade, Organic, Rainforest Alliance, and UTZ (ITC, 2015).¹ This rapid spread is attributable to different factors. Sustainability standards address environmental, human rights, and welfare issues along agricultural value chains. An increasing number of consumers is willing to pay for such process-related attributes (ITC, 2011; Potts *et al.*, 2014). Further, development agencies have played a key role in promoting and facilitating farmer participation in certification schemes (Bacon, 2005; Handschuch, Wollni, & Villalobos, 2013). Increasingly, private companies also evolve as important players. More and more public and private sector organizations develop new sustainability standards. According to the International Trade Center, there are now over 200 different standards with a focus on sustainability (ITC, 2016).

The literature about various aspects of sustainability standards is growing. One strand of literature analyzes whether such standards actually deliver on their promise to promote environmental sustainability (Méndez, Bacon, Olson, Morris, & Shattuck, 2010; Blackman & Naranjo, 2012; Kleemann & Abdulai, 2013) and socioeconomic development (Bacon, 2005; Bolwig, Gibbon, & Jones, 2009; Jones & Gibbon, 2011; Chiputwa, Spielman, & Qaim, 2015) in smallholder production of coffee and other tropical export crops. The results are mixed. A few studies suggest that the price premium farmers receive is sometimes too small to recover the

costs associated with certification (Beuchelt & Zeller, 2011; Weber, 2011; Ibanez & Blackman, 2016). Others find that farmers benefit from higher output prices and agricultural and social services often provided in certification schemes (Bolwig *et al.*, 2009; Jones & Gibbon, 2011; Kleemann, Abdulai, & Buss, 2014). Concrete outcomes seem to depend on the type of standard and a variety of contextual factors. A second strand of literature explores determinants of farmers' adoption of sustainability standards, particularly exploring whether marginalized households are possibly excluded (Kersting & Wollni, 2012; Handschuch *et al.*, 2013).

Here, we ask whether the design of sustainability standards could be improved such that farm households benefit more. We explicitly focus on smallholder farmers' subjective preferences, without addressing the broader question as to how standards should optimally look like in order to contribute to sustainability in its various dimensions. This broader question—while also highly relevant—is beyond the scope of this article.² The smallholder perspective is partial but important, because many of the world's poor depend on the small farm sector as their main source of income and employment. The proliferation of sustainability standards in international food markets means that more and more smallholders are directly or indirectly affected.

A good understanding of the features of standards that are particularly liked and disliked by farmers is important to better tailor related programs to smallholder conditions. Yet, the available evidence in this direction is scant. Existing impact studies focus on the—overall—effect of specific standards such as Fairtrade and Organic. Thus, very little is known on how specific design attributes (e.g., the price premium, pesticide

* This research was financially supported by the German Research Foundation (DFG). Final revision accepted: May 16, 2017.

bans, agricultural training, or rules on postharvest management) contribute to the overall effect. Similarly, existing studies on determinants of farmers' adoption of sustainability standards focus on the decision to adopt a specific standard. It remains unclear which of the design attributes are particularly difficult for farmers to comply with. Standards with varying design attributes are usually not observed in the same setting, so observational data alone are of limited value. We employ a choice experimental approach to analyze farmers' preferences for sustainability standards in general, and for specific design attributes in particular.

Focusing on farmers' preferences is important for at least two reasons. First, it is known that farmers' preferences can influence their decision on which marketing channel to use, whether or not to participate in voluntary contractual agreements (Schipmann & Qaim, 2011; Ochieng, Veettil, & Qaim, 2017), or to adopt new farming practices (Ward, Ortega, Spielman, & Singh, 2014; Marenya, Smith, & Nkonya, 2014). By better addressing farmers' needs and preferences, adoption of sustainability standards may become more attractive and feasible for a larger number of farmers. Second, addressing farmers' preferences can be promoted as a goal in itself. Over the last two decades, community-driven and participatory approaches to poverty reduction have become more popular in the research and development community (Méndez *et al.*, 2013; World Bank, 2016). Against this background, organizations that set and define sustainability standards have increasingly introduced participatory mechanisms to ensure that farmers' points of view are properly considered (Potts *et al.*, 2014). For instance, Fairtrade International and the International Federation of Organic Agriculture Movements (IFOAM) emphasize their commitment to including the voices of their members in developing and modifying standards.³

In our choice experiment, we differentiate between the preferences of male and female farmers. It is well known that technical and institutional innovations can affect men and women differently (Alderman, Chiappori, Haddad, Hodinott, & Kanbur, 1995; Doss, 2001). Sustainability standards often focus on tropical export crops, such as coffee or cocoa. While women tend to provide a substantial amount of labor for cash crop production, they are often less involved in the marketing of these crops than men, as evidence from Africa, Asia, and Latin America shows (Lyon, 2008; Sen, 2014; Chiputwa & Qaim, 2016).⁴ A few studies therefore conclude that men capture most of the economic benefits from certification (Lyon, 2008; Bolwig, 2012; Sen, 2014; Loconto, 2015). Also, certain certification requirements—such as the ban of herbicides—may further increase the workload of women (Bolwig, 2012). Finally, farmer organizations, which play an important role in certification, are often the domain of men. For instance, about 80% of the registered members of Fairtrade certified farmer organizations are men (Fairtrade International, 2009). As a result, women may have little say in decisions on services to be provided and projects to be implemented (Sen, 2014; Lyon, 2008; Bacon, 2010).⁵ Related challenges and opportunities are increasingly recognized by standard-setting bodies, because gender equality is an important component of sustainable development (Fairtrade International, 2011). Scientific evidence suggests that gender policies introduced through sustainability standards can be effective in improving women's bargaining power (Chiputwa & Qaim, 2016).

Our contribution to the literature is threefold. First, we propose a new way to think about sustainability standards, namely as a package of requirements (e.g., the use of pesticides is prohibited; quality requirements have to be met) and benefits (e.g., farmers are paid a price premium; they are offered

training, credit, or inputs). These requirements and benefits could be combined in various ways, which is particularly relevant when designing new standards or trying to further improve existing ones.

Second, we use a choice experiment—designed building on participatory methods—to analyze farmers' preferences for specific certification requirements and benefits. The empirical analysis focuses on smallholder coffee producers in Uganda. We are aware of only three choice experimental studies related to sustainability standards (Ibnu, Glasbergen, Offermans, & Arifin, 2015; Vlaeminck *et al.*, 2015; Hope, Borgoyary, & Agarwal, 2008). These studies look at concrete cases of existing standards, such as Fairtrade and Organic. We add to this literature by examining farmers' preferences for more generic, hypothetical attributes of sustainability standards, involving economic, social, and environmental components.

Third, this is the first quantitative study on sustainability standards with a comprehensive gendered research design. In the choice experiment, we include attributes of standards that specifically focus on gender issues and support for female farmers. In addition, we build on gender-disaggregated data to capture the perspective of different individuals within each household. In each household, we interviewed a male and a female household member. We also account for gender in the econometric analysis. We compare preferences of men and women and further disaggregate the group of women into female spouses and female household heads.

2. DATA AND BACKGROUND

(a) Coffee in Uganda

Over 70% of Uganda's population live in rural areas and have agricultural landholdings (UBOS, 2016). Coffee is the country's main foreign-exchange earner and a major source of income and employment for 3.5 million families (UCDA, 2016). Over 60% of Uganda's coffee production is exported to the European Union (UIA, 2016). Both Arabica and Robusta coffee are grown. Yet, the main share of the country's coffee production (85%) is Robusta, which is grown at altitudes up to 1200 m. Uganda has two harvest seasons for coffee: March–June and September–November (UIA, 2016).

Robusta coffee is grown predominantly by smallholder farmers. The average farm size ranges from 0.5 to 2.5 hectares. Coffee is usually intercropped with bananas and beans. Shade trees are traditional elements in this farming system (UCDA, 2016; UIA, 2016). Most farmers use few inputs and rely on family labor. Access to agricultural services, such as trainings and credits, is limited (UBOS, 2010). Other challenges facing the Ugandan coffee sector are coffee diseases, poor soil management and fertility, and use of old, unproductive coffee trees. Average yields are low (750 kg per hectare for Robusta). Poor infrastructure and volatile world market prices for coffee further reduce farmers' profits (UCDA, 2016).

With some regional variation, about 80% of the coffee-producing households in Uganda are headed by males (UBOS, 2010). As in most other African countries, coffee is a male-dominated crop. Women tend to have little control over coffee revenues and production decisions, even though they provide a substantial share of the manual labor.

(b) Household survey

To select households for the survey and choice experiment, we used a multi-stage sampling strategy. We purposively

Download English Version:

<https://daneshyari.com/en/article/5105105>

Download Persian Version:

<https://daneshyari.com/article/5105105>

[Daneshyari.com](https://daneshyari.com)