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# Global sustainability standards and food security: Exploring unintended effects of voluntary certification in palm oil

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ABSTRACT

Voluntary labelling and certification schemes have become increasingly used in global agro-food chains. They primarily aim at enhancing the sustainability of agricultural production processes. The global palm oil supply, the different environmental and social problems related to it, and the Roundtable for Sustainable Palm Oil (RSPO) certification clearly illustrate this. However, global sustainability standards may also have unintended impacts on food security and local development, which are not explicitly taken into account. This article explores the unnoticed effects of voluntary palm oil certification in Indonesia and Ghana and identifies their implications on local and national food provision. As voluntary labels and certification schemes are an emerging category of global governance instruments, their role in food security, as a global public good, should be taken seriously and connected to political and scientific debates on their future involvement in realizing food security.



## 1. Introduction

The 2009 World Summit on Food Security defined global food security as the situation when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food to meet their dietary requirements and food preferences for an active and healthy life (World Summit on Food Security (WSFS) (2009)). Many consider achieving global food security to be primarily a task for national authorities who are expected to focus on increasing agricultural production to supply food for a growing and wealthier population (FAO, 2009). However, the role of governments in global food provision is changing, as more food is traded internationally (Liapis, 2012; RaboBank, 2010) and large multinational companies become more influential. Likewise, national governments refrain from interference with (agricultural) markets because of their commitments to international trade agreements, such as those under the WTO, and because of a dominant (neoliberal) political discourse. Moreover, most governments are unable to control food trade effectively because contemporary agricultural and food supply chains have become increasingly complex, global and often concentrated (Gibbon and Ponte, 2005), while the human and technical resources of public agencies are limited. Finally, international relations are based on the principle of national sovereignty, which restricts governmental interference with the domestic affairs of other countries. As a consequence, global food security and sustainability of global agro-food supply systems are interdependent, but global food security remains largely unresolved: there are, for instance, still 842 million undernourished people in the world (FAOSTAT, 2013). Therefore, taking the limitations national governments face and the absence of effective multilateral institutions into consideration, it is timely to assess whether alternative steering instruments exist and how these impact on food security.

One category of alternative steering instruments in global food provision comprises voluntary certification schemes, such as Roundtable for Sustainable Palm Oil (RSPO), MSC and GlobalGAP. This article reviews these schemes, because although they are mostly oriented towards sustainability of primary production of the global commodities, they may have unintended and indirect impacts on global food security. Private certification schemes may entail supplementary costs for producers, exclude smallholders (Bush et al., 2013; Hatanaka, 2010), worsen the position of women, increase food prices, displace local production, or divert agricultural goods from food production to more attractive export markets for processing (German and Schoneveld, 2012). Certification requirements may also positively impact smallholder food production through crossover effects from improvements in knowledge, technology and input markets (Swinnen and Vandemoortele, 2008) and smallholders' access to food through the guarantee of reliable high income for producers who succesfully comply to the standards.

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To have a better understanding of possible (unintended) impacts of global sustainability standards on food security, we start by describing the background and emergence of these schemes and then focus in particular on the unintended effects of the RSPO in Indonesia and Ghana to illustrate these. We then discuss whether labelling and certification schemes, more generally, should actively incorporate food security or team up with other actors. We conclude with identifying several implications for research and policy debate on the role of private voluntary certification schemes in the promotion of global food security.

## 2. Private certification as a global food governance instrument

In contemporary societies, food and agricultural production, processing and use constitute sets of changing networks and flows, crossing multiple international borders (McDonald, 2010; Oosterveer and Sonnenfeld, 2012). Although still the largest proportion of food is consumed domestically, the proportion of traded food is increasing; palm oil and soybean oil are clear examples of expanding global trade, in terms of both volume and exporters involved (Table 1). Today more than in the past, promoting food security is a matter of 'managing the complex feedback between local food insecurity and the entire global food network' (McDonald, 2010, p. 39). These transformations translate into a need to identify appropriate ways of steering these global food networks.

Since the introduction of Fairtrade and organic food labelling in the 1980s, the number of private voluntary sustainability standards and certification schemes has increased rapidly. Today, there are in total 447 labels (www.ecolabelindex.com/ecolabels (accessed 17 March 2014)), addressing different aspects of the production and trade process. Over time, these labels have come to include more substantive issues and become more detailed and stringent (Auld, 2014; Auld et al., 2009; Gibbon and Lazaro, 2010). Table 2 illustrates the rapid growth of some selected certified commodities and their relative share of global production and consumption. Certification has created momentum in both private sector strategies and public policy that radiates beyond the boundaries of the certification schemes per se: in the case of palm oil, lead companies and non-governmental organizations allocate substantial time and resources to RSPO.

Most voluntary private standards claim to have been introduced to support sustainable production and reduce the negative environmental and social impacts of global food trade by involving producers as well as consumers in steering supply chains (Henson and Humphrey, 2010; Ponte et al., 2011). Most certification schemes are 'based on third-party auditing of compliance with performance-based sustainable resource management standards developed by non-state actors' (Auld et al., 2008, p. 188). This new form of governance has been introduced in response to public pressure by NGOs and growing concerns among citizens, who are confronted with unwilling private corporations and failing governments to address important ecological and social problems in the context of globalization (Boström and Klintman, 2008; Mol et al., 2000; Spaargaren and Mol, 2008; Spaargaren and Oosterveer, 2010).

NGOs are an important driver in the introduction and promotion of standards, because compared to governments, they are more flexible and their policies are less entrenched in formal procedures, while NGOs are often viewed by the public as the 'new civil regulators' (Eden and Bear, 2010; Fuchs et al., 2011; Oosterveer, 2007; Oosterveer and Spaargaren, 2011). The information offered through private voluntary labels and standards is not necessarily limited to product-related characteristics, as is the case in official regulations but can also address the wider production process and producer and consumer concerns.

Concerned consumers may exercise their influence more indirectly through boycotts and buycotts (Micheletti, 2003; Micheletti et al., 2003), and ask for reliable information about how the product is manufactured. Labels assist consumers in selecting products with claims of better health and environmental and social performance because they contain standardized consumer-oriented information about the product and the production process involved.

Labels and certification schemes have become important instruments in steering producer and consumer practices for addressing ecological and social problems. They enable supply chain actors, such as processing and retailing companies, to exercise their power

**Table 2**
Growth and relative share of certified commodities.
*Source*: (Potts et al., 2014). Figure for palm oil confirmed at http://www.rspo.org/en/Market_Data_-_as_at_11th_June, accessed July 9, 2014.

| Commodity | Certified production as share of global production (%) | | Certified sales as share of global production (%) | Certified area (ha) |
|---|---|---|---|---|
| | 2008 | 2012 | 2012 | 2012 |
| Coffee | 15 | 40 | 12 | 2,750,891 |
| Cocoa | 3 | 22 | 7 | 1,828,216 |
| Palm oil | 2 | 15 | 8 | 1,623,168 |
| Tea | 6 | 12 | 4 | 466,389 |
| Bananas | 2 | 3 | 3 | 148,129 |
| Sugar | < 1 | 3 | < 1 | (est) 635,444 |
| Soy beans | 2 | 2 | 1 | 595,172 |

*Note*: This table contains data from the 16 most important certification schemes.

**Table 1**
Key indicators for global agricultural trade.

| | Quantity trade (million tonnes)[a] | | Exports as share of production[b] | | Number of exporters[c] | |
|---|---|---|---|---|---|---|
| | 1970 | 2010 | 1970–1979 | 1995–2010 | 1970 s | 2000 s |
| Wheat | 57.1 | 161.1 | 17.9 | 18.7 | 36 | 91 |
| Rice | 8.3 | 33.0 | 3.9 | 6.6 | 63 | 114 |
| Maize | 29.7 | 107.8 | 14.8 | 11.9 | 58 | 102 |
| Beef | 2.8 | 9.8 | 9.2 | 11.8 | 62 | 109 |
| Soybean oil | 12.3[d] | 96.6[d] | 20.3 | 27.0 | 32 | 87 |
| Palm oil[a] | 0.9 | 35.3 | 46.8 | 81.0 | 30 | 114 |
| Whole milk powder | 0.2 | 2.4 | 35.2 | 43.1 | 48 | 116 |

[a] (FAOSTAT).
[b] (Liapis, 2012, p. 25).
[c] (Liapis, 2012, p. 29).
[d] Includes all soybean trade.