



Tropentag, September 17-19, 2018, Ghent

“Global food security and food safety:  
The role of universities”

## High-Resolution Mapping of the Trade in Tropical Commodities: Estimating Impacts of Corporate Zero-Deforestation Commitments

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### Abstract

The production and trade of agricultural commodities in the tropics is both an important source of income (with exports worth around \$270 billion in 2013), and a leading cause of environmental degradation – for example, four commodities (beef, soybeans, oil palm and wood products) are responsible for around 40% of deforestation in the region. The length and complexity of international supply chains, however, make these impacts all but invisible to the companies and consumers, consuming those products in importing countries. In this presentation, we will outline methods and results from the Trase initiative (Transparency for Sustainable Economies; <http://trase.earth/>), a flagship effort to map international supply chains of tropical commodities, from sub-national regions of production through to the markets of consumption, via the companies handling that trade. We will explain the diversity of datasets required to piece together international trade flows, link actors (e.g. individual companies) to the places where they operate, and estimate the impacts of that trade. Using examples from the Latin American soybean sector, we will explain how Trase can shed light on the efficacy of Zero Deforestation Commitments (i.e. commitments made by companies or countries to ensure that deforestation does not occur in their supply chains). We will discuss variability in the strength of Zero Deforestation Commitments, quantify the growth in their market share, reveal the variability in their geographic coverage, and present some of the first analyses of their net effects (accounting for potential leakage), ultimately outlining the potential for meeting their stated goal of ending commodity-associated deforestation by 2020.

**Keywords:** Accountability, deforestation, soy, supply chain transparency, tropical commodities