Potential EU food policies for reaching sustainable development goals
PhD Project

Food consumption choices and agricultural production decisions determine the food system sustainability performance along environmental, economic and social dimensions. Policies steering consumer and supply chain actors’ behavior thus could contribute to reaching several of the sustainable development goals\(^1\) (SDGs). Being a large trading entity and a political union, the EU is in a position that allows to implement food policies that address sustainability concerns in order to fulfill its commitments to the Paris Agreement\(^2\) and the 2030 Agenda for Sustainable Development\(^3\).

The objective of this dissertation project is to identify the impact of potential EU food policies on different sustainability indicators and their contribution to reaching the targets of food system related SDGs as well as to reduced greenhouse gas emission levels. In the course of the dissertation project, three food related policy areas are addressed: Consumer policies, production-related policies, and agricultural trade policies.

A large share of the EU population does not adhere to dietary guidelines.\(^4\) Increasing malnutrition and obesity occurrences conflict with SDGs aiming at food security and improved nutrition (#2), healthy lives (#3), and reduced inequality (#10). Overconsumption related production impacts conflict with the goal to take action against climate change (#13), to use ecosystems sustainably (#15), and with the commitment to limit the global temperature increase under the Paris Agreement. In the first part of the dissertation project, consumer-side interventions are reviewed which support a transition to healthier and more environmentally sustainable diets. Based on this, food taxes and subsidies are tested in a modelling approach in order to identify the necessary price shifts to achieve adherence to dietary guidelines on EU average.

The second part of the project is focused on target 3 under SDG12 “By 2030, halve per capita global food waste at the retail and consumer levels...”. Different policy scenarios are modelled which could contribute to reducing food waste on EU level. Potential changes in consumer behavior are compared to and combined with food waste reuse options in agricultural production. We address competing food waste reduction options and discuss their implications on food system level.

In the third project part, impacts of EU agricultural and trade policies on food consumption and production in trading partner countries are assessed. With a focus on nutrition and environmental impacts in low income countries in this part we address core issues of sustainable development. The choice of considered SDG indicators depends upon data availability. It is assessed in how far trade contributes to sustainable development or in how far it impedes progress towards reaching the SDGs.

---

2. [https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement](https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement)