



Research School for Operations
Management and Logistics

Greendish: Food supply chains delivering sustainable and healthy diets

Sonja Rohmer – WUR

The increasing need for food and nutrition security for all kinds of consumer groups, healthy food consumption and increase of sustainability practices necessitates actors in food supply chains to redefine “optimal diets” and redesign their structure and management practices. GREENDISH aims to (i) define affordable diets for Dutch citizens that are both healthy and sustainable, as well as (ii) indicate the consequences of alternative healthy and sustainable diets for the design of food supply chains. Central is the development and application in scenario studies of a mathematical decision support model, which combines requirements regarding performance criteria into appropriate diets for Dutch citizens. The model will be tested in a number of case studies in collaboration with business partners, in which the impact of a population shift towards a more plant-based diet will be analysed. GREENDISH will result in: 1) a comprehensive calculation model using data on food groups, food products and nutrients according to health and sustainability criteria; 2) insights in optimal dietary patterns/menus for Dutch population segments according to age, sex, and dietary habits; 3) insights in the affordability, health and sustainability consequences of shifting to a plant based diet; and 4) insights in the requirements to be put on food supply chains in order to deliver the proposed healthy and sustainable diets.