

# Frontiers Journal of **Renewable energy**

## **Lean production in the agricultural sector – A sustainable solution for Swedish farmers?**

Henrik Barth, Halmstad University, Sweden

### **Abstract**

Swedish farmers have begun to use Lean principles and tools in an effort to transform their businesses. However, differences exist in how Lean is used in the agricultural sector compared to how it is used in the manufacturing sector. It is still not clear how Lean principles and tools adapt to farm operations. In this study, we conduct a follow up on the participating farmers and evaluate the barriers and effects, based on a structured interview guide. Data collection was carried out by telephone interviews. The interview guide includes fifteen aspects of barriers that has been identified in a recent strategic literature review, which have been validated in consultation with industry and academic experts. In total, 15 farmers participated in the follow up study. Preliminary findings confirm that challenges such as commitment of management, training of managers and employees, a firm leadership, and the role of change agents were important to lean implementation success. The resistance among employees proved to be an important factor for the lean implementation.

### **Biography:**

Henrik Barth is an Assistant Professor in Industrial Management at Centre for Entrepreneurship, Innovation and Learning (CIEL), Halmstad University, Sweden. He is conducting research on business model innovation in small and medium-sized firms, addressing challenges to growth and digitalization in different industries.