



Universitatea
Transilvania
din Braşov

HABILITATION THESIS

SUMMARY

Title: Voluntary certification and its impact in forestry

Domain: Silviculture

Author: Assoc. prof. dr. eng. Aureliu-Florin HĂLĂLIŞAN

Transilvania University of Braşov

BRAŞOV, 2024

The habilitation thesis shows the evolution of the research activities done by the author in the field of Forest Stewardship Council (FSC) voluntary forest certification systems. After finishing the PhD thesis in 2014 (first Ph.D thesis in Romania o forest certification) research was conducted on audit techniques, impact of forest certification on forest districts (forest management certification) or companies (chain of custody certification). The objective of the thesis was to evaluate the performance of voluntary forest certification system as a way of promoting sustainable development. This type of certification has been developed as a monitoring tool aimed at improving governance in corporate environmental management and differentiating products in the increasing environmentally sensitive markets.

The second chapter is focused on audit technique, accreditation results and impact of COVID on audit technique. Research on audit technique was conducted focusing on procedures or auditor's decisions. On the basis of the analysis of 105 audit reports issued by accredited third-party certification bodies in Romania, this chapter sheds light on procedural factors that have significant influence on the characteristics of non-conformities identified by FSC third party audits. Also, the reports from accreditation bodies and decisions of auditor's were evaluated. Addressing the outcomes of accreditation activities, the goal of this chapter is to examine the findings raised against Certification Bodies by Assurance Services International assessors during their accreditation evaluations regarding the quality of auditing FSC forest management certification around the world. The content of all 141 publicly available assessments reports elaborated between 2013 and 2019 was analysed and the 454 identified findings (non-conformities and opportunities for improvement) were categorised utilising an innovative framework based on key desirable attributes of the audit process to capture certification-related changes on-the-ground. Accreditation activities allow capturing major failures in essential audit related activities: auditor's decisions, ability of auditors to collect, interpret, and synthesise evidence, as well as making reports publicly accessible. Another new research direction on forest certification was adressed in this thesis. The COVID-19 pandemic caused economic difficulties for companies in forestry as well as significant issues for entities dealing with Chain of Custody (CoC) certification. Global certification schemes, like FSC, based on some preventive provisions in their procedural frame, developed new approaches and derogations to maintain quality evaluation and the power of standards. Based on a survey applied to companies that had CoC FSC audits in 2020, this subchapter aimed at evaluating the perceptions of companies regarding the audits performed under COVID pandemic procedural derogations, along with other research objectives like the continuous investigation of certification drivers or advantages.

Chapter three evaluate the link between forest certification and european legislative framework (Regulation 995/2010-EUTR). This chapter aims to understand and explain how FSC certification has influenced the implementation of EUTR in Romania and how it has affected forestry stakeholders' perceptions of this implementation. The research is based on

a mixed research approach, where quantitative and qualitative data collection and analysis were conducted during key policy periods in 2014, in order to capture a nuanced snapshot of the formal and practical implementation of EUTR in Romania, and the influence of FSC certification on this process.

Chapter four focuses on forest management certification and impacts on forest districts. The purpose of this chapter is to provide an insight into the certification process. It presents the result of a survey applied to 417 forest management structures in Romania, which was intended to identify the perception of their managers regarding the reasons to adopt certification, the changes determined by the certification, the problems during the process, and the benefits. The study reveals the difference in perception among different types of forest management structures.

Regarding the forest certification and impact on health and safety at forest districts level, research was done to identify, describe, and thus reduce health and safety issues in forest management in Romania. By extracting and analysing the health and safety related non-conformities from auditing reports issued for Romanian forest management operations between 2013 and 2018, the study reveals that the most important risk factors are organizational factors, followed by equipment-related factors. The correlation of the results with other findings in the forest operations literature indicates that forest management certification is a suitable tool to identify and describe the health and safety aspects of forest management related activities, especially for forest operations.

Chapter five is focused on CoC and impact of forest certification on companies. This chapter aims to analyze the adoption of FSC Chain of Custody certification system in connection with the adoption of the main general meta-standards (e.g. ISO certifiable standards), in a challenging context such as that faced by Romanian forestry companies. Using a questionnaire-based survey covering a large number of recently certified firms, the study sheds light on the profile of these companies, the drivers of certification, its economic aspects, the perceived benefits, the intention to keep the Chain of Custody certification, as well as some aspects of the joint adoption of FSC Chain of Custody certifiable standards and general meta-standards.

The final part of the thesis presents the development directions for my career in terms of didactic and scientific activity.