

## Documents

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**The applications of Industry 4.0 (I4.0) technologies in the palm oil industry in Colombia (Latin America)** (2022) *The Digital Agricultural Revolution: Innovations and Challenges in Agriculture through Technology Disruptions*, pp. 109-142.

**DOI:** 10.1002/9781119823469.ch5

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### Abstract

Seven percent of world palm oil (PO) production comes from Latin America (LATAM), 15% certified as sustainable PO with the adoption of the Round Table model for Sustainable Palm Oil (RSPO), pointing to sustainable agriculture that contributes to hunger reduction and a reduction of dependence on hydrocarbons for energy. Colombia is the fourth global producer of PO and the first one in LATAM and expects to produce over two million tons in 161 municipalities and 21 departments in 2021. This document will focus on the Colombian PO industry. The contribution of this study is twofold: First, it provides a more comprehensive review of the PO industry technology literature based on Scopus and Clarivate Analytics, using the reporting checklist of preferred reporting items for systematic reviews and meta-analyses (PRISMA). Second, as far as the authors know, this is one of the first studies to address the technological solutions applied by Colombia's PO producers and aims to help fill this research gap. Evidence for the use of Internet of Things (IoT), big data (BD), and cloud computing in the Colombian PO industry was found in the extraction plants, in crop and pest management, in the use of seeds with smart tags, and in biofuel generation from PO, positioning it as a country with multiple lessons to offer to the PO industry. © 2022 Scrivener Publishing LLC.

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2-s2.0-85148969617

**Document Type:** Book Chapter

**Publication Stage:** Final

**Source:** Scopus

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