

Inclusive Development International (IDI) is a global organization that defends communities from harmful corporate practices. A major point of interest for the IDI is the palm oil supply chain, which is linked to adverse environmental and social outcomes worldwide. With the University of Chicago's Data Science Institute, IDI aims to leverage grievance reports and pinpoint actors within the supply chain to support human rights advocacy.

The team enhanced the data pipeline from five grievance sources to accurately identify the entities involved. Using a Large Language Model (LLM) approach, inconsistently-structured text data was standardized into structured datasets. Furthermore, the team verified entity names with authoritative sources, designated entity roles, and generated unique identifiers, which enabled record linkage and a composite view of supply chain violations.

Through this analysis, 458 mills and plantations - disproportionately impacting Indonesia and Malaysia - were identified as complicit in corporate exploitation, including environmental and human rights violations (Figure 1). Alarmingly, the team found that only 14.8% of implicated parties were shut down by their parent companies. As new grievance entities continue to emerge across the five corporations (Figure 2), the findings reinforce the need to demand greater corporate accountability in global palm oil production.

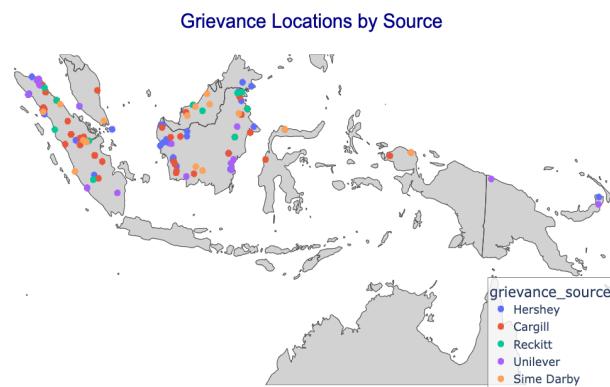


Figure 1. Locations of mills and plantations implicated in grievances in Southeast Asia.

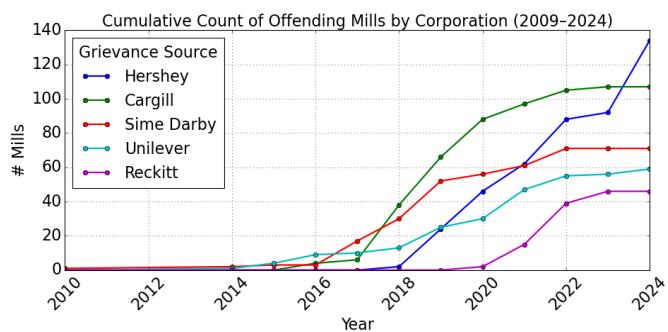


Figure 2. Cumulative count of offending mills across years, grouped by corporation.