



Tropentag, September 10-12, 2025, hybrid conference

“Reconcile land system changes
with planetary health”

EUDR, market shocks and local export restrictions in Ghana’s natural rubber sector: Potential benefits and risks for smallholders

STEPHAN MABICA¹, ERASMUS TETTEH², INGRID FROMM³

¹*Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences (HAFL), Switzerland*

²*Kwame Nkrumah University of Science and Technology (KNUST), Agroforestry,*

³*Bern University of Applied Sciences, School of Agricultural, Forest and Food Sciences (HAFL),*

Abstract

The enforcement of the EUDR on 30 December 2025 is expected to restrict rubber supply to the European Union and generate upward pressure on prices due to the inelastic nature of global demand. This study analyses the potential financial effects for smallholder rubber producers in Ghana using a cost-benefit analysis under multiple scenarios.

Findings show that even a minor decline of 2.5 % in European Union-bound supply could raise the net present value of a 4-hectare plantation by 19 % for an independent compliant producer, illustrating the outsized effect of small trade shifts on producer-level returns.

Yet such potential gains remain vulnerable to external shocks. A simulated COVID-19-like crisis in the fifth year of productivity leads to a 23 % decline in net present value, as liquidity shortages limit producers’ ability to cover operational costs. During the 2020 crisis, many contracted producers turned to side-selling, mainly to foreign intermediaries exporting unprocessed rubber to other countries. This practice continued beyond the crisis and constrained supply for local processing.

In response, Ghana’s regulatory authority banned unprocessed rubber exports through intermediaries while allowing direct exports by producers up to their own production capacity. Although this measure represents a positive effort to preserve market access during crises or for non-compliant producers, its viability remains limited. Procedural and logistical hurdles—such as registration, quality controls, and finding buyers—make this option difficult to activate at the individual level, particularly in crisis contexts where fast action is needed. Collective export structures could help reduce these barriers, but current rubber associations face major challenges in coordination, trust, and participation.

The study concludes that while the EUDR could improve profitability for some producers, its benefits may be offset by factors such as local inflation, exchange rate fluctuations, and price volatility driven by production trends in major rubber-producing countries. Market shocks remain a shared risk for all producers, and contingency responses—such as the direct export option—require stronger coordination at the sector level to become effective.

Keywords: Collective action, cost-benefit analysis, eUDR, export ban, market access, market shocks, rubber value chain, side-selling, smallholder farmers, transaction costs