Low traceability, low transparency, high deforestation in the Ivorian cocoa supply chain

Côte d’Ivoire is the world’s largest producer of cocoa, growing about 40% of cocoa bean supplies. Around two thirds of its cocoa is exported to the EU and the UK.

We pulled together several publicly-available datasets to link cocoa production, and its associated deforestation, to specific companies and markets.

1. The majority of cocoa (over 55%) is untraced

32% exported by untransparent traders who disclose no information about their suppliers (‘unknown’ sourcing)

24% indirectly sourced from local intermediaries by major traders and is nearly impossible to trace (95% CI: 22.9–24.9%).

20 to 70% of the major traders’ sourcing is indirect.

Traceability to farm lags behind

Traders in the Cocoa and Forests Initiative mapped 40% of the farms supplying them, representing only 22% of all Ivorian cocoa exports in 2019.

2. Cocoa is a major driver of deforestation in Côte d’Ivoire

45% of the undisturbed tropical moist forest lost between 2000 and 2019 converted into cocoa (2.4 Mha).

In 2019, 25% of the cocoa area was located within protected areas and classified forests in Côte d’Ivoire.

3. Cocoa deforestation exposure is embedded in all the supply chain but mostly in the untraced sourcing

58% of the total cocoa deforestation is attributed to untraced sourcing (25% to indirect and 33% to unknown sourcing).

Per tonne, untraced sourcing is slightly more exposed to deforestation than sourcing traced to cooperatives (48 vs 45 ha/ton.y-1).

EU is exposed to 838,000 ha of deforestation from Ivorian cocoa with 56% from untraced sources.

Conclusion

The sector needs to work beyond individual supply chains

- Incorporating indirect sourcing in zero deforestation commitments
- Need for transparent, nationwide traceability systems – also key for better traced payments to farmers – coupled with a robust deforestation monitoring system
- Must be combined with land use policies, landscape initiatives, and increased means targeting remaining forests

Methods

Sourcing traced to cooperatives

Cocoa map

Kalischeck et al. 2022

Cocoa deforestation

Cocoa production

Cocoa deforestation exposure

Sourcing traced to cooperatives

Number of farmers per cooperative

Production per farmer

Volumes traced to cooperatives

Expoits – Volumes traced

Indirect sourcing

Cocoa map

Kalischeck et al. 2022

Tropical Moist Forest

Vancutsem et al. 2021

Cocoa deforestation

Cocoa production

Cocoa deforestation exposure

Cocoa deforestation

Cocoa production

Relative cocoa deforestation (ha/ton produced)

Volume per trader

Company or Importing country
cocoa deforestation exposure (ha/ton sourced)