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The New EU Regulation on Cadmium in Chocolate: Impacts on the Colombian Cocoa Value Chain

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Introduction

- From January 2019, the European Commission regulates Cadmium (Cd) contents in cocoa based products.
- Cocoa from Colombia and other Latin American countries have higher Cd concentrations than other regions.
- For Colombia, cocoa has been promoted in programs for the substitution of illegal crops and post-conflict.
- This study aims to analyze potential negative impacts on the Colombian cocoa sector and to find mitigation strategies.

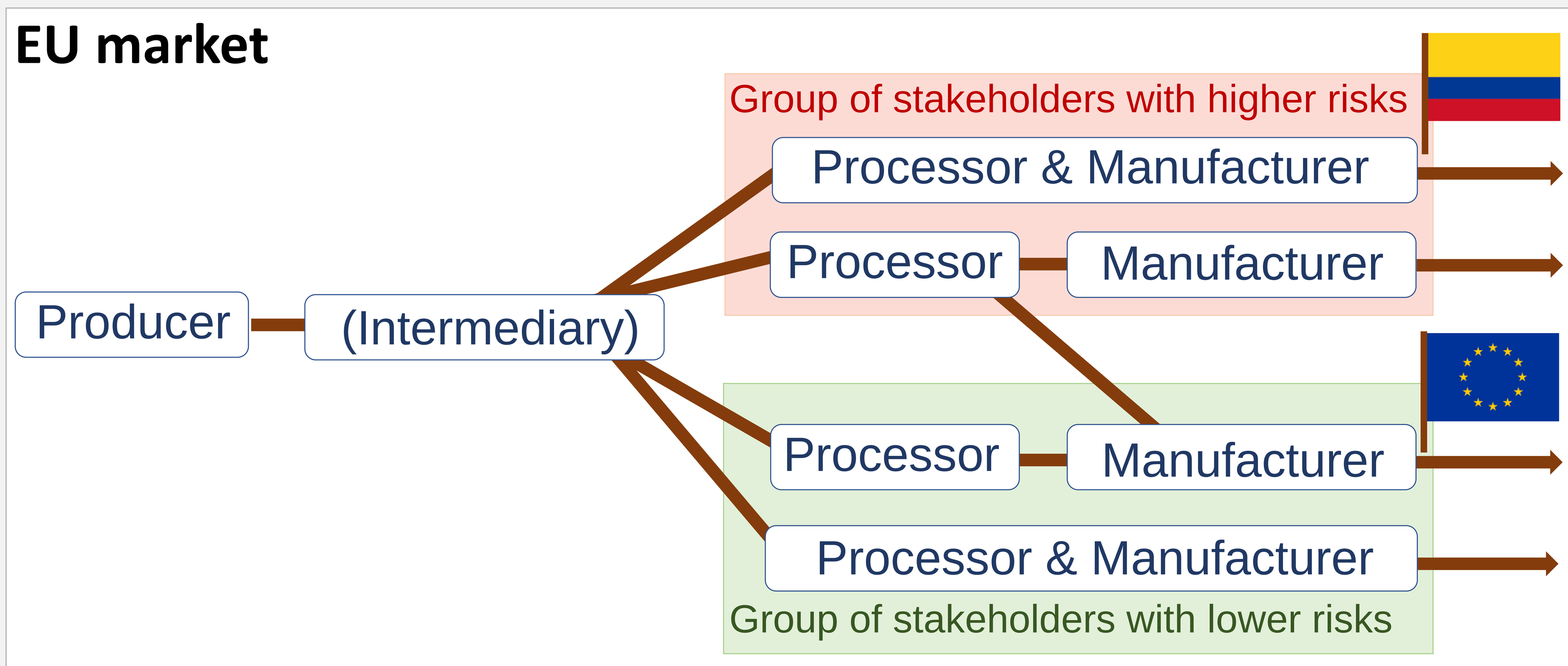
Methodology

Secondary data was used to build a conceptual model with potential risks and alternatives for stakeholders.
Trade data was used to select potential market distribution scenarios (Fig. 1) and evaluate the impacts for each scenario.

Results

80% National market

20% International market [About half of total cocoa exports go to the EU (i.e. 10% of all Colombian production)]



EU regulation No 488/2014 of 12 May 2014
(Cd maximum levels per total dry cocoa solids):

Product	% total cocoa solids	Cd threshold mg/kg
Milk chocolate	< 30	0.10
	≥ 30	0.30
Chocolate	< 50	0.30
	≥ 50	0.80
*Cocoa powder**		0.60

* Sold to the final consumer or as an ingredient in sweetened cocoa powder sold to the final consumer (drinking chocolate).

Figure 1. Market distribution scenarios of Colombian cocoa.

Impact and mitigation strategies

<u>Producers</u>

Risks
- Increment of production costs derived from Cd mitigation.
- Insufficient technical assistance for mitigation measures.
- Processors and/or manufacturers change cocoa source.

Alternatives
- Reduction of Cd bioavailability.
- Reduction of Cd uptake capacity.

<u>Processors and/or manufacturers</u>

Risks
- Increment of manufacturing costs derived from blending.
- Blending not feasible for many Colombian stakeholders.
- Producers cannot provide low Cd cocoa.

Alternatives
- Engage in Cd mitigation (e.g. development of blending strategies).
- Supporting mitigation at producer level.

Conclusion

- Processors and manufacturers from Colombia have higher incentive to support mitigation strategies at producer level (main source).
- Processors and manufacturers from the EU might choose not to blend but change source.
- Blending has additional implications such as higher costs (that could be transfered to producers).
- Beyond economic impacts, illegal crops substitution programs and post-conflict might also be affected.

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