

Perspectives and Impacts of the EU Cadmium Regulation on the Colombian Cacao Value Chain



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1. Research Questions

- What is the **perception and impacts** of the EU Cadmium Regulation across the Colombian Cacao Value Chain?
- Are there any cadmium **mitigation strategies** in place across the Value Chain?
- How **perceptions, impacts and mitigation strategies** vary depending on the nodes of the chain?

2. Background

2.1 Types of Cacao:

Bulk: *Forastero*

Fine and Flavor: *Criollo* & *Trinitario*

THE THREE MAIN VARIETIES OF COCOA PLANT



2.2 Colombian cacao production:

Producers:

35,000 Cacao farmers, smallholders.

Cacao grow and post-harvest treatment

Industry:

Two companies buy up to 80% of national production

Cacao transformation, Cacao imports

Cacao products available nationally and for exportation

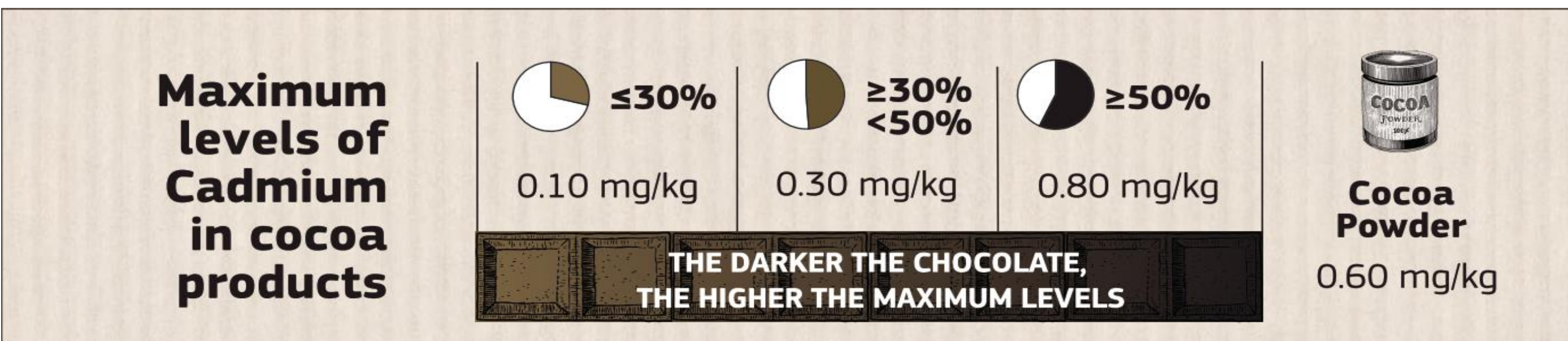
Institutional

Research and extension

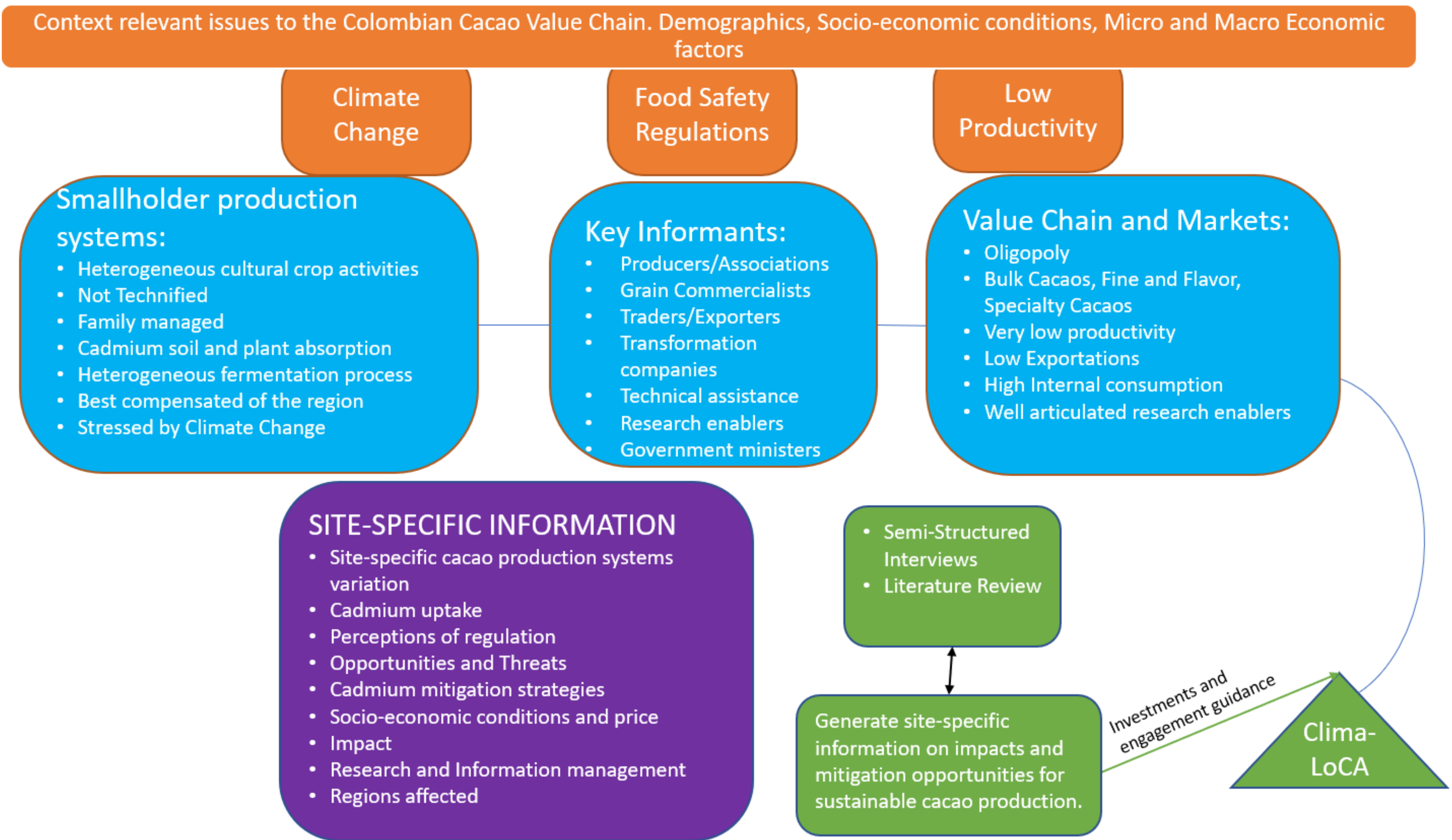
Sector enablers, governmental



2.4 European Regulation (EU) NO 488/2014



3. Conceptual and Contextual Framework



4. Results

	Perception of the Regulation	Impacts of the Regulation	Mitigation Strategies	Research Progress
Producers	Not fully understood. Misleading quotes: <i>"Cacao is going to be banned"</i>	Cacao buyers request cadmium levels certificate.	Avoid using fertilizers, Liming, Improved Fermentation	28 Research Projects in Colombia, Ecuador, Peru, Trinidad & Tobago and Indonesia: <ul style="list-style-type: none">• Cadmium soil Measuring• Cadmium soil Mapping• Cadmium cacao plant measuring• Soil and nutrient management• Cadmium uptake mechanisms and accumulation
Industry	<i>"Grain is not under regulation"</i> <i>"Cacao production might be discouraged due to misinformation"</i>	Cadmium lab tests: 20-40 USD Cacao pre- selection depending on markets	Blends of Cacao	<ul style="list-style-type: none">• Cacao genetic variability• Mitigation Strategies• Socio-economic implications
Institutions	Internal consumption is a protective factor. Health based regulation but also commercial based	Fostered research: Cacao and Soil testing.	Liming pH increase Zinc increase Phytoremediation	

5. Conclusions

1. Cadmium is the most prominent challenge for the future of Cacao commercialization so far.
2. The start up of the regulation has fostered an environment of uncertainty in the value chain: Different perceptions and narratives
3. Producers seem to have the least robust adaptive capacity for the issue while the industry has taken steps ahead.
4. Information dissemination is one of the most important issues in the short-term: Unpleasant situations to abuses on price. A communication strategy is necessary for dissemination of information related to the regulation and research advances.

6. Recommendations / Limitations

- A communication strategy for dissemination of information related to the regulation and research advances.
- Find alternative markets for exportation
- Integration of the results with similar studies in Peru and Ecuador to study cross-scale implications
- Not reaching all the cacao producing regions

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