

<u>COCOA CRUNCH</u>- How soaring prices of cocoa beans are shaping the future of the chocolate industry.

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Abstract:

This study examines the effects of high prices of cocoa on the global chocolate sector, with particular focus on the impact of the increased prices on consumers, manufacturers, and producers.

Estimated causes of this increase in cocoa price include climate change, supply chain disruptions, and labour problems in key cocoa-producing regions. It analyzes the impact of these higher prices on the chocolate industry as a whole, specifically on cost production, pricing plans, and consumption behaviour.

Since the companies have higher costs of production, they tend to raise the price or shrink the product size, which influences consumers' decision to buy. Additionally, the paper criticizes challenges in supporting the industry in its adaptation and transformation towards sustainability initiatives, ethics in sourcing, and innovative products.

The economics of pressure on cocoa farmers, especially small-scale producers, the study also highlights how fair trade helps improve their livelihoods in the face of rising costs. In conclusion, the paper explores the idea that although the rising trends in cocoa prices are an uphill task for the chocolate industry and its consumers, they drive shifts towards more sustainable and ethical practices that may reshuffle the future of the industry.

Keywords: Sustainable and Ethical Practices, Global Chocolate Sector, Rising Costs, Industry Transformation.

Introduction:

An unprecedented surge in the price of cocoa threatens to be a grave challenge for millions of chocolate lovers within the global chocolate industry. This lift in the price of the basic ingredient is affecting every level of the supply chain-from small-scale cocoa farming in cocoa-producing countries to gigantic manufacturers and, finally, to consumers. All these factorsclimate change, disruption of supply chain and labour shortages-have driven prices up in cocoa that puts the industry into adaptation mode. This price rise does not end here because companies are forced to change production costs, pricing strategies, and innovation to sustain consumer demand. The high prices for the rising producers are an economic burden, and practices of fair trade are coming forward as some support systems for small-scale producers in the cocoa producing countries.

An increase in chocolate price and decrease in size of the product mean that consumption has been realigned through altered consumer purchases.

The research here talks about the dynamic influence of the increasing price of cocoa on the industry of chocolate manufacturers, how they adapt to these changes, what challenges they face in the hands of producers, and what sustainability and ethical sourcing play in shaping the future of the industry.

Background And Context:

Cocoa happens to be the key component used in the production of global chocolate worth more than \$130 billion. It is the most produced crop in many tropical regions, and amongst the top producers are the Ivory Coast, Ghana, and Indonesia. This very industry segment now seems to face significant challenges driven by environmental, economic, and social factors.

In the last few years, cocoa prices have fluctuated drastically, mainly due to climate change, supply chain disruption, and labor shortages in major cocoa-producing regions. Extreme weather conditions, such as droughts and floods, are now



affecting cocoa yields, making it challenging for farmers to meet global demand. The COVID-19 pandemic and other global supply chain disruptions have further complicated the situation, increasing transportation costs and reducing the availability of cocoa beans.

The rising cost of cocoa affects the chocolate supply chain as a whole. Manufacturers struggle with increased costs of production, and the only options to remain profitable are for many to either increase the price of chocolate products or to reduce their size, which goes directly into the pocket of the consumer. Consumers now face either higher prices on their beloved chocolate brands or purchasing different ones. At the same time, more consumers are developing awareness of the ethical and environmental dimensions of their purchases, asking for more sustainable and ethically sourced products.

On the other end of the supply chain, small-scale cocoa farmers are barely surviving financially. Cocoa is considered a highvalue commodity, yet farmers in many cocoa-producing countries are suffering from extreme poverty, unstable market prices, and the effects of climate change. Fair trade initiatives and sustainability efforts are trying to provide these farmers with better wages, improved working conditions, and long-term support, but the increasing pressure of rising cocoa prices threatens the effectiveness of such programs.

In this context, this paper explores how soaring prices of cocoa are reshaping the dynamics of the chocolate industry. The study delves into the broader implications for chocolate consumers, manufacturers, and cocoa producers, with a special focus on the role of sustainability and ethical sourcing in navigating these challenges. Understanding these shifts is crucial for ensuring the long-term health of the chocolate industry, securing fair practices for farmers, and meeting consumer demand for high-quality, ethical products.

Rising Cocoa Prices:

The prices of cocoa have been fluctuating a lot in recent years. These fluctuations are mainly influenced by climate change, supply chain disruptions, and labour shortages in the key cocoa-producing regions. Rising cases of extreme weather conditions such as droughts and floods prevent the farmers from meeting global demands through cocoa yields. Further, the COVID-19 pandemic and other global supply chain disruptions do not improve the situation and cause more transport cost and higher cocoa beans unavailability.



Source: NielsenIQ



Impact on Chocolate Manufacturers and Consumers:

The rising prices of cocoa trickle down the entire chain. Producers now pay more to make their products, and in an effort to avoid falling into the red ink, most producers have increased the price of their chocolate product or shrunk its size-an impact that directly reaches the consumers. With such changes taking place, consumers are waking up also to increase their favourite chocolate brands' prices or change in consuming practices. Based on this, manufacturers also face the challenge of innovation and coming with more sustainable practices such as sourcing from ethical practices for a rising segment of environmentally and socially-conscious consumers.

Challenges of Small-Scale Cocoa Farmers:

On the production side, smallholder cocoa farmers face important challenges in becoming financially viable. Even though cocoa is a high-value product, some of the countries that produce cocoa are composed of many with extremely poor farmers, highly unstable market prices for the growers, and climate change ravages. Only fair trade initiatives and programs of sustainability work to ensure that these farmers earn better wages, receive better working conditions, and receive longer-term support, with the increases in cocoa prices putting these programs at risk. The more substantial the price of cocoa, the more vulnerable the farmer and therefore it is even more critical that fair trade and sustainability programs ensure that they are better cared for over the long term. This paper explores difficult dynamics of cost of cocoa and how these price rises may shape the industry for chocolates in novel dimensions.

Literature Review:

Several studies indicate the intricate relationship between the global chocolate industry and cocoa prices. For instance, a study by Läderach et al. in 2013 looks at how climate change, particularly through temperature variability and changed rainfall conditions, has reduced cocoa yields in key producing regions such as West Africa. This environmental impact is further compounded by supply chain disruptions, like the COVID-19 pandemic, discussed by Gomez et al. (2020), which contributes as a critical factor affecting the instability of cocoa prices due to limited transportation and labor shortages.

Manufacturers' responses to rising cocoa prices have been widely studied. Liu et al. (2021) suggest that companies are increasingly raising prices or reducing product sizes as a strategy to maintain profit margins, but this impacts consumer behavior. This trend is discussed further by Jackson and Smith (2019), who observe that the push for responsibly sourced chocolate continues to rise as consumers become more conscious of sustainability and labor practices, thereby also pushing brands to adapt to fair trade and eco-friendly practices.

The most vulnerable group in the supply chain for cocoa is the small-scale cocoa farmer. Despite the high market value for cocoa, Kouadio et al. (2018) conclude that farmers receive very few increases in the selling price due to market fluctuations and exploitation. According to Benoit et al. (2017), fair trade initiatives can be a solution that will help improve the lives of farmers in terms of income and working conditions. However, with the recent rise in cocoa prices, fair trade programs are facing pressure from this situation, which may have negative effects on their sustainability.

Finally, the general trend from this literature can clearly be traced: there exists an interconnectivity of these challenges by the consumer, manufacturer, and producer communities with increases in cocoa price. Increasing urgency to demand for sustainable, ethical practices is, therefore seen as necessary today than ever, ensuring the sustenance and welfare of farmers in terms of stability for the industry.

Methodology

This paper uses a qualitative and secondary research approach in looking into the effects of surging cocoa prices on the chocolate industry by exploring it from the consumer, manufacturer, and cocoa producer levels. This study aggregates different credible information to one source in the attempt to try to find industry trends, challenges, and opportunities. Below is a detailed description of the methodology:

1. Research Design

The research employs a descriptive and analytical framework to identify the causes and effects of increasing cocoa prices. It will hence be able to enlighten on the full impact which the price fluctuations affect in the



chocolate industry and stakeholders. There was no collection of primary data, with the use of questionnaires or interviews, and the study is based on the entirely secondary data sources.

2. 2. Data Collection Process

a. Literature Review:

A literature review of journal articles, industry reports, articles, and other published material was conducted. International Cocoa Organization (ICCO) Fairtrade International World Cocoa Foundation (WCF) Global Chocolate Market Analysis

Some of the keywords used in the search queries are as follows:

- "Rising cocoa prices and their impact".
- "Chocolate industry issues"
- "Climate change impacts on cocoa production"
- "Ethical cocoa sourcing"
- Consumer purchase and price sensitivity of chocolate
- Fair trade cocoa producers

b. Statistical and Market Reports:

Global cocoa production, price statistics, and forecasts were sourced from credible sources, including government reports, white papers from the relevant industry, and statistical directories, such as Statista, ICCO reports, among others.

c. Case Studies:

- Case studies of chosen companies like Hershey's, Mars, and Fairtrade-certified brands were reviewed in order to learn from the industry's response towards rising cocoa prices.

- Examples were provided of the successful sustainability initiatives and ethical sourcing programs that were implemented.

3. Analytical Approach

a. Thematic Analysis:

The collected data was grouped according to dominant themes that include:

Factors causing higher cacao prices, including climatic change and labor issues

Effects of the increase on the chocolate industry; for example, cost of production and price strategies.

Impacts on the consumer; that is, behavioral changes and affordability.

The plight of the cocoa farmer, poverty, and fair wage.

Efforts to sustainability responsible sourcing.

b. Comparison:

An assessment of challenges amongst small-scale cocoa farmers vis-a-vis manufacturers and consumers was done to establish differences and dependencies.

It included price trends along with consumer buying habits and sustainability initiatives for understanding the greater implications.

c. Critical Thinking:

The ethics and sustainability practices of the industry were critically evaluated in relation to their ability to minimize the effects of increasing cocoa prices.



4. Case Studies and Examples

The study included some concrete examples of how the industry has adjusted, such as:

Companies such as Hershey's and Lindt embracing sustainability certifications and ethical sourcing.

Examples are success stories of fair trade initiatives as means of improving farmers' livelihoods.

Ethical sourcing and sustainable chocolate products are preferred due to changed consumer behavior.

5. Limitations of the Study

It is a pure secondary data which does not involve any form of primary research, such as interviews and fieldwork. It does trend that is global, by which issues at the local levels of specific cocoa-producing countries won't be entirely represented.

Some of the data might be generalised as some very specific company data may not be available publicly. By integrating these methodologies, the paper provides a critical examination about how high cocoa prices affect chocolate manufacturers, which would always highlight interconnectedness between manufacturers, consumers, and farmers, pointing towards the role of sustainability and fair trade in responding to those challenges.

Results

The results of this research give a broad perspective on how rising cocoa prices have reshaped the dynamics of the chocolate industry. The findings can be categorized into three areas: impact on consumers, challenges for manufacturers, and struggles of cocoa producers; thus, showing how interconnected the stakeholders are within the global cocoa supply chain.

1. Impact on Consumers

Increased Costs for Chocolate Products:

Rising cocoa prices have forced manufacturers to increase product prices. This has led to higher retail prices for chocolate products globally, making them less accessible to certain demographics.

• Product Size Reduction:

Companies are using "shrinkflation," reducing the size of chocolate bars and other products while keeping their prices, in order to manage costs without increasing prices drastically. This has increased consumer dissatisfaction.

• Shifts in Consumer Behavior:

Many consumers are becoming more selective about their purchases, prioritizing affordability over brand loyalty. A growing number of consumers demand ethical sourcing and environmentally friendly chocolate products, albeit at a premium. Some consumers are turning to alternative, cocoa-free products, which may reshape long-term demand for traditional chocolate.

2. Challenges for Manufacturers

• Higher Production Costs:

Rising cocoa prices have led to significant increases in production costs for chocolate manufacturers. Additional costs include transportation, energy, and packaging expenses, further straining profit margins.

Adaptation Strategies:

• **Sustainability Efforts:** Companies are investing in sustainability initiatives, such as partnering with ethical sourcing programs and using renewable energy in production.

• **Product Innovation:** To cater to changing consumer preferences, brands are exploring alternatives like low-cocoa or plant-based chocolates.

• Supply Chain Disruptions:

Manufacturers face delays and increased costs due to disruptions in global supply chains, exacerbated by climate events and geopolitical instability.



3. Struggles of Cocoa Producers

Economic Instability:

Small-scale farmers, who produce the largest share of the world's cocoa, are the most affected by the price increase. While cocoa is a high-value commodity, many farmers still live in poverty because they are not receiving a significant portion of the profits.

• Impact of Climate Change:

Extreme weather events, including droughts and floods, are reducing cocoa yields, threatening farmers' livelihoods. Climate variability also increases the unpredictability of income for cocoa producers.

• Dependency on Fair Trade Initiatives:

Although fair trade programs seek higher incomes and better conditions, they suffer from disadvantages in terms of scale and financing. Higher cocoa prices stress the very capacity of such programs to deliver reliability.

• Labor Challenges:

Cocoa farming often relies on child labor and underpaid workers. Rising prices have not significantly improved wages or living conditions for farmers, perpetuating systemic inequalities in the supply chain.



4. Broader Industry Trends

• Ethical Sourcing on the Rise:

As consumers demand transparency, companies are adopting fair trade certifications and promoting sustainable practices. However, these efforts remain uneven across the industry.

• Potential for Industry Transformation:

High cocoa prices are pushing the industry towards long-term structural changes, including: Investment in technology to make farming more efficient.

Exploration of substitutes for cocoa such as lab-grown cocoa or substitute ingredients. Strengthened policies for sustainability and ethical labor practices.



5. Future Implications

• Consumer Preferences Shaping the Market:

Ethical and sustainable chocolate is becoming a competitive advantage, with consumers willing to pay premiums for such products.

• Opportunities for Farmers:

Improved access to technology, training, and fair trade networks could help farmers increase their productivity and profitability.

• Risks of Further Disparities:

If rising prices continue unchecked, small-scale farmers and low-income consumers may be excluded from the benefits of the industry's growth.

Summary of Results

This research finds that rising cocoa prices pose a great challenge for all stakeholders but, at the same time, offer opportunities for innovation, sustainability, and ethical transformation within the chocolate industry. The success of these changes, however, depends on the collaborative efforts of governments, companies, and consumers in addressing systemic inequities and environmental pressures.

Discussion

How the Findings Answer the Research Question

The objective of the research was to investigate the effect of increased prices of cocoa on the chocolate industry, specifically focusing on how it would affect consumers, manufacturers, and cocoa producers. The following is a clear answer by demonstrating:

Consumers face high prices and diminished product size, hence causing a change in consumption behaviors and rising interest for eco-friendly and socially responsible chocolates.

• **Manufacturers** are having to operate at higher production costs, pushing them to either embrace shrinkflation, increase prices, or innovate with alternatives.

• Climate change, poverty and more insidiously, systemic inequities, are making little cocoa producers, especially smaller-scale farmers, financially vulnerable - a case for stronger, more impactful fair trade, sustainable initiatives.

The research shows that the mentioned problems are interconnected, and hence solving one problem- such as climate resilience-benefits all stakeholders.

Comparison with Existing Research

The findings align with earlier studies and reports that highlight:

•Climate Change Effects: Similar to previous studies, this study reiterates that adverse weather conditions are the biggest cause of decreased cocoa productivity, which contributes to higher prices.

•Behavioral Changes among Consumers: Other studies also report that consumers are developing a preference for sustainable and fair-trade products, especially among young consumers.

•Challenges for Farmers: In line with existing literature, this study reconfirms that cocoa farmers are still the most vulnerable link in the supply chain because of poverty, unfair pricing, and lack of access to resources.

However, the study reveals nuances:

•It points out the emerging trend of "shrinkflation" as a new response from manufacturers, which was less highlighted in previous literature.



• Adds to the dialogue through showing that sustainability and ethical sourcing can be a competitive advantage rather than a moral imperative.

Surprises or Problems Faced

1. Surprises:

Consumers' interest in sustainable chocolate is greater than expected, even if the premium price was raised. The disproportionate effect of inflation on small-scale farmers compared to larger players was a reflection of deeper system flaws in the chocolate supply chain.

2. **Problems:**

Lack of access to real-time data for specific cocoa-producing regions made it difficult to quantify the exact economic pressures on farmers.

A lack of uniformity in sustainability initiatives across chocolate companies created challenges in assessing their effectiveness.

Conclusion of Discussion

The findings contribute to a deeper understanding of how rising cocoa prices are reshaping the chocolate industry, emphasizing the need for collaborative solutions. The industry must focus on sustainability, fair trade, and innovation to ensure long-term growth while addressing the vulnerabilities of farmers and the evolving preferences of consumers.

Share of global cocoa production by region



Data Source: Food and Agriculture Organization of the United Nations • Production data for 2022.

Conclusion

The impact of rising cocoa prices on the global chocolate industry is explored as complex in this research. Insights are given into how such changes affect consumers, manufacturers, and cocoa producers. This research reveals that rising production costs have led manufacturers to raise prices, shrink product sizes, or invest in innovative products. All these factors greatly affect consumer behavior. Most consumers now prioritize affordability or prefer ethical and sustainable options, changing the demand landscape.

The price rise of cocoa has presented critical demand for innovation and sustainability practices to manufacturers. These changes will be about cost-cutting, but also about joining the consumers' call for more transparent and ethical practices. But still, the weakest links in the supply chain remain those small-scale cocoa farmers. The former face extreme poverty and the impact of climate change while systemic inequities plague the latter. While fair trade and sustainability programs are to some extent easing the situation, they do little to mitigate the increasing pressures on these farmers.



This research provides evidence of the need to look into these issues in a collaborative manner. Such efforts require governments, industry heads, and consumers to understand how value can be equitably distributed throughout the supply chain but with environmental sustainability.

Future research areas could include emerging technologies in improving cocoa yields, alternatives for chocolate production, and how the industry-wide adoption of ethical practices will reshape the chocolate market. It is in these areas that understanding will be critical for ensuring the resilience of the industry, securing farmer livelihoods, and meeting changing consumer expectations in a more ethical and sustainable world.

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