



Overcoming cocoa supply challenges while meeting the functional, organoleptic and sustainability needs of consumers and producers

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Originating from the ancient civilizations of the Maya and Aztec, cocoa was used both as a currency and a revered drink. Over the centuries, and significantly so after the 16th century when the Spanish brought cocoa to Europe, its popularity has grown worldwide. Cocoa is now a part of numerous food and beverage formulations, from chocolates and desserts to beverages and baked goods. Its flavor, texture, and color make it an invaluable ingredient, with

increasing applications.

Cocoa demand forecasts are strong

Along with this, consumer demand toward chocolate products and other cocoa-based applications has risen and is forecast to go on rising. According to Innova Market Insights¹, in the past five years, cocoa has grown by 3% CAGR as an ingredient present in food and beverage products, now seen in 13% of all products in the global market. Furthermore, Europe leads globally in cocoa product launches, accounting for 48% of new developments in this category. Meanwhile, the Middle East and Africa are experiencing the fastest growth, with a 10% annual increase in launches over the past five years. Moreover, cocoa is predominantly featured in the confectionery and bakery sectors, which together make up 66.4% of food and beverage launches containing cocoa ingredients.

Cocoa market challenges

While the growth prospects of the cocoa market are promising, the global cocoa market is confronting a convergence of challenges. Climate change is affecting production levels, increasing costs are straining both consumers and suppliers, and there is a growing demand for more sustainable alternatives.

The impact of climate change on cocoa production is unquestionable, with extreme weather events such as floods and droughts becoming more frequent and severely affecting yields. This disruption has led to a substantial increase in the cost of cocoa ingredients. According to the International Cocoa Organization (ICCO)² historically, cocoa prices remained relatively



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stable, hovering at or below €2500 per ton for several decades. However, they began to surge in mid-2023, reaching a peak of €9208 per ton in April 2024, and have since fluctuated around €6000 per ton. This volatility is impacting the entire food and beverage industry, where cocoa-based raw materials—such as cocoa butter, cocoa liquor, and cocoa powder—are seeing unprecedented price increases. Such volatility creates uncertainty for food manufacturers reliant on cocoa as a stable input, compelling them to explore alternatives and mitigate risks.

These market impacts are compounded by changing consumer preferences – increasingly conscious of the environmental and social impact of their purchases. Innova Market Insights reports a growing demand for Fair Trade and sustainably sourced cocoa, pushing manufacturers to prioritize traceability and transparency in their supply chains. However, the increased cost associated with these certifications adds another layer of complexity for producers and manufacturers who must balance ethical sourcing with profitability.

A collaborative approach for cocoa alternatives

To navigate these challenges, Sensient has developed a collaborative, holistic approach integrating expertise from Sensient Flavors & Extracts, along with Sensient Food Colors. This strategy allows Sensient to offer complete solutions encompassing flavor, body, and color, tailored to meet the specific needs of food producers facing cocoa shortages.

By leveraging the expertise of multiple divisions, Sensient ensures that every aspect of a product—whether it's taste, texture, or appearance—is optimized. For instance, Sensient's cocoa alternatives can significantly reduce cocoa powder content (by up to 30%) while maintaining the same rich sensory experience, ensuring cost-effectiveness without compromising quality.

This integrated approach means that Sensient is not merely providing a product; it is offering a partnership where product development is collaborative, and solutions are bespoke. This flexibility is crucial in an environment where raw material fluctuations and consumer preferences can shift rapidly.



Technical solutions: functional and organoleptic benefits

Sensient's solutions are designed to help manufacturers not only compensate for cocoa shortages but also enhance the functionality and sensory profile of products. From a technical perspective, Sensient provides a range of solutions that cater to the diverse requirements of food formulations.

Functional Attributes: Sensient's alternatives address key functional aspects such as dry matter, solubility, and texture. For products that rely on cocoa's body and structure, Sensient's tailored formulations ensure these essential attributes are preserved even when cocoa content is reduced.

Organoleptic Qualities: On the sensory side, Sensient solutions enhance the taste and aroma profiles of food products, ensuring an authentic cocoa experience. For manufacturers seeking to maintain or boost cocoa perception in their products, these formulations deliver a rich taste signature and a consistent color profile, aligning closely with consumer expectations for premium cocoa-based foods.

By integrating these functional and organoleptic properties, Sensient supports a wide range of applications — from bakery to

confectionery and beverages — ensuring that producers can deliver high-quality products even amidst cocoa shortages.

Preparing for market fluctuations

The current cocoa supply challenges highlight the need for adaptive, collaborative solutions that support manufacturers in navigating market fluctuations. Sensient's approach is not limited to a static product portfolio; it is centered on providing tailored solutions for every customer, regardless of scale. Whether a client uses a specific blend of cocoa powders in bakery products or requires a specialized flavor for beverages, Sensient collaborates closely with their R&D teams to develop the ideal solution.

This proactive, customer-centric approach distinguishes Sensient in the market, ensuring that food producers have the support they need to innovate and remain resilient amid ongoing cocoa supply challenges.

As the cocoa market faces volatility, Sensient's comprehensive, technically driven approach ensures that food producers can adapt swiftly and continue to deliver quality products to meet evolving consumer demands.

References:

1 Cocoa Trends : Global Market Overview, July 2024 <https://www.innovamarketinsights.com/trends/cocoa-trends/> 2 App - International Cocoa Organization



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