



Product specific sustainability assessment within the value chains of chocolate manufacturers in Germany

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Executive Summary

The chocolate industry is facing growing challenges in connection with the environmental and social impact of the global cocoa trade. The **increasing demand for sustainably produced chocolate** has led companies to increasingly rely on cocoa beans that have been produced according to defined sustainability standards.

Certificates such as sustainability labels reduce information asymmetries and help to communicate ethically differentiated product characteristics. **Trust in sustainability labels**, which can be strengthened by additional labeling methods such as Quick Response (QR) codes, plays a key role here. Trust is also meaningful for policy-making: mandatory communication of sustainability criteria is **highly accepted by consumers**. **In this context, trust** in and the **perceived integrity of political actors** are important factors.

Effective communication strategies are needed to promote sustainable consumption. Consumers should be addressed holistically, including their emotional and social side as well as personal beliefs. Media presentation, e.g. via virtual reality experiences, that convey the lives of cocoa farmers can increase the willingness to pay for sustainable products. Focusing on the negative consequences of non-sustainable actions can increase consumers' problem awareness – information about positive consequences in turn strengthens a sustainable attitude.

Sustainability standards should minimize negative ecological and social consequences and improve the living conditions of cocoa farmers. The selection of sustainability labels should be based on transparent criteria such as fair premium payments and holistic sustaina-

bility concepts to ensure credibility. Clear communication by chocolate manufacturers about the reasons for selecting certain sustainability labels is key.

Companies should take responsibility in the producing countries by integrating documented sustainability projects. Companies can make a difference and improve environmental and social conditions by actively participating in sustainable local resource projects. Companies should focus more on the targeted marketing of sustainability proiects to meet the arowing interest of informed consumers. Examples include literacy courses, training on cocoa by-products, organic cocoa farming and the promotion of local community projects. Collaboration with **cooperatives** in the arowing countries is crucial to successful design and implementation, with clear communication and an intercultural confidant

By bundling their purchases of sustainably produced cocoa, companies can jointly promote positive change. In particular, the purchase of cocoa from company projects in countries of origin could be an effective means of ensuring compliance with various sustainability criteria. In addition to the traceability of the cocoa purchased, these projects, seek to ensure a living income, deforestation-free production and the exclusion of child and forced labor. provided they include appropriate instruments. This enables manufacturers of products containing cocoa to take various sustainability criteria into account as well as to obtain and pass on the verv information that has become necessary as a result of reforms at German and European level.



Introduction and problem definition

As a result of globalization, government regulations and the demands of consumers, the management of supply relationships and distribution channels has become increasingly complex for companies. At the same time, the environmental and social impacts of consumers' consumption decisions and companies' purchasing decisions have become increasingly complex and therefore almost impossible for the respective stakeholders to understand. This is happening in a situation in which consumer behavior is becoming more differentiated, with social and ecological aspects becoming increasingly important for parts of the population when making purchasing decisions.



Figure 1: Global Cocoa-Chocolate-Production Network

With this guideline, we want to support companies in overcoming the challenges regarding the complex ecological and social impacts of their business decisions and show ways of communicating sustainability information to consumers. The guideline is a result of the project »Value Chains and Consumer Decisions – Remote Effects of Governance and Product Biographies Using Cocoa as an Example« (CoVaCoa) funded by the German Federal Environmental Foundation (DBU). In CoVaCoa, a transdisciplinary team of employees from Osnabrück University and the company Weinrich Schokolade worked together intensively.

The CoVaCoa project not only examined the social and environmental impact of different certifications, but also the governance structures and consumer awareness. These effects were compared with the effects of companies' own standards. The sustainability assessment is based on a comprehensive approach, considering not only direct but also indirect effects on the economy, society, and the environment. Against this backdrop, our research aimed to identify starting points for communicating these initiatives and their effects to consumers in order to promote sustainable consumption.

Accordingly, this guideline includes recommendations on two identified focal points:

(1) increasing sustainability within the value chain and

(2) increasing sustainable consumption

These main topics are each subdivided into corresponding objectives and measures.

The aim of the topic of **increasing sustainability within the value chain** is to strengthen the decision-making and action skills of chocolate-producing small and medium-sized enterprises (SMEs), from which various measures can be derived. On the subject of **increasing sustainable consumption**, various measures are used to show how sustainability information can be successfully communicated to consumers. Finally, a conclusion is drawn.

We hope you enjoy reading this guideline and that it provides you with some new perspectives and ideas.

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Increasing sustainability within the value chain

Certification and sustainability projects in the production countries

The media and campaigns are increasingly turning consumers into critical consumers who are increasingly questioning the negative environmental and social impact of the global cocoa trade and chocolate production. Awareness of sustainable production and trade practices is therefore becoming increasingly important.

To meet the demand for sustainably produced chocolate, companies have the option of using cocoa beans that have been produced in compliance with sustainability standards. If the requirements of the sustainability standards are applied and monitored, they should slow down the loss of biodiversity and improve the living conditions of cocoa farmers. These sustainability standards and labels exist in the form of independent and voluntary certification systems, company-owned programs, governmental and supranational initiatives, or regulations. The corresponding seals or labels on the packaging serve as sales arguments and a basis of trust for customers and end consumers. This trust in turn depends on compliance with the certification standards.

In addition to organic and Fairtrade seals, the Rainforest Alliance seal is also widely used for cocoa. In addition, there are now numerous chocolate producers' own labels, which should be viewed critically due to a lack of neutral verification, a lack of transparency and consumers being overwhelmed by an excessive number of different seals.

Organic, Fairtrade and Rainforest Alliance labels each have a different approach, with different entry barriers. Rainforest Alliance certification, for example, includes both **eco**logical and social criteria, falls short of the standards set by the organic and Fairtrade labels in both areas.

For a long time, the focus of Fairtrade trading was one-sidedly on improving the living and working conditions of producers in the Global South; however, more recently many **environmental criteria** have been included in the Fairtrade standard. For example, around a third of the criteria in the standard for smallholder producer organizations relate to environmental issues. Nevertheless, the Fairtrade label is still primarily a social label whose environmental standards are lower than those of the European organic label. As the standards of the Fairtrade label are lower than those of the organic label, the **entry hurdles** for producers are also lower. As the premiums paid in organic production are also higher than in the Fairtrade sector, gradual certification is a good idea, in which producers are initially Fairtrade-certified but aim for organic certification in the long term. This takes time, as producers lack both the resources and the knowledge to convert to organic and at the same time the actual conversion process from conventional to organic farming can take six to 36 months.

When selecting labels, attention can be paid to the cost of premium payments made to the cooperatives and how these premiums are distributed. For example, one selection criterion for a sustainability label could be that the highest possible proportion is paid directly to the cocoa farmers. In addition, sustainability as a holistic concept should be a premise and the integration of social, ecological, and economic aspects into the standards should be important. Independent verification is also a decisive quality criterion when it comes to the transparency of a label. The dilemma with these labels, however, lies in the declining trust of consumers. However, there are certainly positive effects in local communities, which can use the financial resources from certified trade to improve their infrastructure. The differences include the frequency of farm visits by extension officers, who are responsible for transferring knowledge to the farmers, the amount of pesticides, herbicides, and fungicides that these cocoa farmers receive, participation in infrastructure improvements and participation in further education and training courses.

There are two main **reasons** for the problems identified in the CoVaCoa study regions:

 an insufficient number of extension officers in relation to the number of cocoa farmers for whom they are responsible,

(2) the geographical proximity or distance between the place of residence of the cocoa farmers and the places where most of the actors in the Ghanaian cocoa system are usually located (local branches or units of the cooperatives themselves, but also of the various state institutions).

In addition to using sustainably certified cocoa, chocolate-producing companies should take **responsibility for the sustainable deve***lopment of the sector* through their own efforts in the producing countries. To strengthen the impact of certification activities and the corresponding transfer of knowledge, additional extension officers can be financed or helped to improve their training, for example. In addition, there are a number of useful sustainability projects, which we address in more detail below.



Sustainability projects

More and more consumers of chocolate have a growing interest in information about the background to production. SMEs can meet this interest through the targeted marketing of sustainability projects. This is not about developing a company's own seal, but about sustainability projects, cooperating with cocoa farmer cooperatives, and purchasing sustainably produced cocoa.

Chocolate-producing SMEs in Germany can play an active role in sustainable raw material projects that are carried out directly in the relevant production regions. A key component of this is strengthening direct contact between cocoa farmers and chocolate companies. The analysis of voluntary commitments by companies revealed that companies are increasingly buying cocoa from company projects in producing countries for some of their products. This not only enables a more direct influence on production conditions, but also better access to information about the social and environmental risks on the ground. In addition to complying with various sustainability criteria, these projects also offer companies the opportunity to implement new measures and measure their effects directly. In this way, sustainability projects in the production countries also contribute to increasing and verifying the effectiveness of measures.

The ecological and social production conditions can be specifically recorded and improved to ensure and document the effectiveness of local commitment. The information obtained can be used both to raise awareness among end consumers and to verify the implementation of sustainability measures by multi-stakeholder initiatives such as the German Initiative on Sustainable Cocoa (Forum Nachhaltiger Kakao e.V.). A **participatory approach** strives for a sustainable effect of the projects:

The agency of cocoa farmers in the countries of origin of the raw materials is strengthened. This can enable independent implementation and continuation of the projects, which is achieved by:

...the project region is selected carefully

Regions are often selected that already have a relatively solid infrastructure and are well positioned in terms of the expected harvest volume. However, this contributes to locations that are remote and/ or have poor infrastructure being left even further behind. It therefore makes sense to choose locations where relatively few projects have been carried out to date. This is where the greatest relative impact of measures can usually be achieved.

...project content and objectives are developed together with project partners in the country of production

- This is done in close cooperation between the individual parties by introducing and democratically selecting ideas from all participants.
- Jointly selected ideas are applied and evaluated. If necessary, adjustments are made and integrated into the projects.
- The interests of disadvantaged groups should also be considered during project development.

...a community-oriented approach is taken to create lasting effects

- Cooperation should aim to achieve not only economic, but also social and ecological goals. An important step in this direction is the joint development of a roadmap that incorporates the interests and needs of all stakeholders, taking into account local contexts. This collaborative process aims to achieve sustainable and inclusive development that has a long-term positive impact on the community and the environment.
- Special attention and sensitivity should be paid to the consideration of local complexities and realities of life. It is vital that a person who is familiar with these issues should be responsible for classifying them.



A selection of potential sustainability projects

Literacy and numeracy courses in the field of adult education are an important component in strengthening local empowerment. However, there is a wide range of additional training opportunities in various areas, such as:

- Income diversification in cocoa farming is crucial to reduce farmers' dependence on fluctuating cocoa prices. By integrating additional sources of income. such as the cultivation of other fruits or the introduction of honeybees, cocoa farmers can improve their financial situation. These diversification strategies not only help to balance income fluctuations, but also increase farmers' resilience to climatic risks and diseases that can affect cocoa farming. Sustainable income diversification therefore not only promotes the economic security of cocoa farmers, but also contributes to the long-term stability and development of the cocoa industry.
- By-products in cocoa cultivation are additional products that are produced during the cultivation or processing of cocoa and can be used for other purposes. One of the most important by-products is compost made from cocoa shells. This compost can be a sustainable solution to improve the soil and at the same time reduce the use of chemical fertilizers. In addition, cocoa shells can be used as biomass for energy production. The sensible use of by-products not only helps to reduce waste, but also offers economic and environmental benefits by promoting alternative sources of income and sustainable practices in cocoa cultivation.

- The production of soap from cocoa po-tashe, another by-product of cocoa cultivation, is an interesting and sustainable option. Potashe, which is obtained from the ash of cocoa shells, contains alkaline compounds such as potassium carbonate. This substance can react with fats in an alkaline environment and form soap. Cocoa farmers can benefit from this practice by using potash as a raw material for soap production. These soaps can be used for the farmers' families own use and have potential as a local commercial product. Recycling potash into soap is therefore not only an environmentally friendly method of avoiding waste, but also creates additional income opportunities for the cocoa-growing communities.
- In Ghana, the need to establish improved health services also became apparent, including projects to improve eye health and the provision of glasses. They would support people both in their everyday lives and at work. Improving healthcare for cocoa farmers can also help to increase productivity. The indirect effects of this measure are obvious: healthier cocoa farmers tend to have a higher capacity to work and are less susceptible to illness, which can lead

to increased productivity. With access to better healthcare, diseases can be detected and treated early, which reduces downtime and stabilizes yields. In addition, good health enables farmers to work more efficiently and sustainably, as they are physically and mentally better able to meet the challenges of cocoa farming. Improved health care can have a decisive impact on the well-being of the cocoa farmers and on their ability to work, and thus on the security of their livelihoods.

- Setting an ecological focus initially strengthens the resilience of the ecosystems and ultimately the cocoa farmers themselves. For example, projects can support the conversion from conventional to organic cocoa cultivation. It also makes sense to establish dynamic agroforestry systems. These systems combine the cultivation of crops and companion plants and are also more climate resilient.
- Our surveys in Ghana revealed that there is a greater demand for English courses, as farmers who only speak local languages feel increasingly left behind.



Specific mention of the growing countries, the region(s) or even the community(ies), and information on the sustainability projects, can be provided on product packaging, thus helping to make the companies' commitment visible to consumers. This information and the content of contributions can be developed together with the cocoa farmers in the project regions. This creates transparency and promotes understanding of the efforts and the assumption of responsibility by companies in the countries of origin of the cocoa.

Packaging with an informational character that targets children could contribute to early **awareness** and **perception** of the topic. Companies that purchase certified cocoa can use the logos of these sustainability seals on their packaging. In addition, information about these seals and the reasons why the company attaches importance to them can be communicated on its own website and social media. In this sense, a **social media manager** could be hired **in the country of production** and report on production, projects, and the community in regular posts. Joint campaigns with sustainability seals are also conceivable.



Cooperation with local cooperatives and intercultural confidant

Cooperatives play a crucial role as promoters and implementers in the implementation, compliance and verification of certification standards and audits, as well as in the implementation of sustainability projects. The **size of the cooperative** has an influence on the cooperation between the cocoa farmers and the cooperating companies.

Large cooperatives have better opportunities to establish comprehensive professional structures to support farmers and are better able to represent the interests of cocoa farmers both politically and vis-à-vis cocoa buyers. On the other hand, the CoVaCoa research showed that larger cooperatives sometimes also have disadvantages.

These disadvantages are reflected, for example, in a lack of transparency and effective communication, which is a challenge in this context. Too many members can impair effectiveness and possibly lead to a greater lack of transparency and inefficient communication. as the distance between the leadership and the grassroots becomes too great. Among other things, there is insufficient communication about how much money the cooperatives receive for certified cocoa, and what routes this money takes. Cases of corruption and abuse of power have become known. These difficulties can be exacerbated by the heterogeneous availability of services and support due to the different geographical proximity between cocoa farmers and cooperatives. As a result, cocoa farmers face increased costs and risks, especially when it comes to accessing necessary resources and services.

To prevent problems in collaboration with cooperatives and ensure the effectiveness of sustainability measures, the **appointment of a intercultural confidant** with clearly defined tasks and responsibilities can play a mediating role for both sides. This requires the role of this person of trust to be clarified on site to ensure effective cooperation between the partners. The use of a cultural mediator who has in-depth knowledge of the cocoa sector and at the same time an understanding of cultural differences between the regions or countries involved can provide support.

Initiating a reflective team process can also be helpful for successful collaboration. Not only, but especially in the case of diverse teams with members from different cultural contexts in both locations, it seems advantageous to plan sufficient time for getting to know each other, and team building. If it is not possible to meet in person, this process can also be organized virtually. Explicitly dealing with roles, principles of cooperation and communication is also of great value. This reflection can take place as part of intercultural training measures, for example.

Finally, **bundling the purchase of sustainably produced cocoa** by SMEs could be another way to bring about positive change in the industry. This requires close collaboration, achieved through clear communication, defined tasks and regular contact with local farmers' cooperatives.



Purchase of sustainably produced cocoa

The consideration of various social and environmental sustainability criteria when purchasing cocoa and intermediate products poses several challenges for German market participants and SMEs in particular. The dependence on the willingness of end consumers and business customers to pay, the demand dependence of the supply of certified cocoa and the heterogeneity of sustainability standards, make it difficult for companies to pursue sustainable sourcing strategies.

The increasing share of certified cocoa in the production of end products containing cocoa for the German market, not only highlights the need for sustainably produced cocoa and intermediate products, but also the value of product information, traceability, and uniform sustainability criteria.

To classify and consider different criteria in the sourcing strategies of German market participants, the measures and offers of suppliers can be assigned to four sustainability criteria:

1. Traceability

Increasing traceability is the key measure for complying with social and environmental sustainability criteria, as this is the only way to identify and reduce the risks of human rights violations and environmental damage at the production site.

Both the producers of end products containing chocolate for the German market and the food retail trade, have committed themselves to taking measures to improve the traceability of the cocoa they use in their voluntary commitments to the German Initiative on Sustainable Cocoa. The measures taken to this end range from the increased use of cocoa that is traded »segregated« to the targeted improvement of transparency within the supply chain. The latter is achieved primarily by ensuring the traceability of processed cocoa back to the farm and by mapping the respective cultivation areas using polygon-mapping.

The first step in improving transparency and traceability along the supply chain is to determine the current traceability of the raw materials used. Suitable strategies and measures for purchasing can then be identified and implemented for the company. Determining the transparency and traceability along their own supply chains not only creates an **information basis for developing internal sustainability strategies for purchasing**, but also enables these companies to check the compatibility of their supply chains with the sustainability strategies of other market participants.

2. Deforestation and loss of biodiversity

The more precise tracing of the cocoa used also serves to counteract biodiversity loss and deforestation in cocoa-growing areas in view of the European regulation »on the making available of certain raw materials associated with deforestation and forest degradation«. Polygon-mapping of individual cultivation areas, in which public and private actors in producing countries are now involved, is an important tool for recording and monitoring the local risk of deforestation and forest degradation. In paying attention to the environmental sustainability of cocoa when purchasing, German SMEs can therefore not only focus on the geographical origin of their raw material, but also whether the producers' cultivation areas have been recorded using polygon-mapping. In this way, companies can both ensure the traceability of cocoa and reduce the risk of environmental damage within their own supply chain.

3. Child and forced labor

To reduce the risk of child and forced labor in their own supply chains, German companies should check whether their suppliers have **Child Labor Monitoring and Remediation Systems** (CLMRS) in place. When purchasing cocoa, companies in Germany can also make sure that their cocoa comes from producers in company-owned projects in producing countries. These projects, in which companies specifically support producers in complying with social and environmental sustainability criteria, often include comparatively high-quality CLMRS, which can more effectively prevent child and forced labor.

4. Living income

The payment of a living income to cocoa-producing households is a necessary instrument for reducing the risk of human rights violations and environmental damage in producing countries. For companies in Germany to ensure that the producers of their cocoa receive comparatively good prices for their yields, they should check whether the Living Income Differential (LID) has been paid for the cocoa when purchasing it.

In addition to considering the LID, the payment of possible origin premiums by suppliers and the **use of certified products**, companies can buy cocoa from company projects in producer countries where the income of producer households is recorded. Some of these projects have indicators and measures that aim to enable these households to earn a living income. In this way, companies can ensure that producers receive comparatively good prices for their products and understand whether further measures are necessary to help producers achieve a living income.

Increasing sustainable consumption

Even if SMEs pursue the above-mentioned sustainability activities in growing countries, these are not observable for consumers due to the great geographical distance – and are therefore difficult to understand. This represents an obstacle to sustainable consumption:

- There are information gaps (asymmetries) between cocoa farmers and consumers along the value chain. Without additional information, consumers usually have no way of gaining knowledge about sustainability activities; neither before, during nor after consuming a product. This means that these aspects cannot be included in the consumption decision. The product alone does not provide any information about how sustainable the conditions were under which it was produced.
- Sustainability activities entail additional costs for companies (for example through increased personnel costs and risk premiums). Due to information asymmetries, these costs cannot be passed on to consumers, even though they signal a positive willingness to pay for fairness and environmentally friendly production practices.

How SMEs can successfully communicate sustainability information to consumers is therefore an important goal in the context of sustainable development. Sustainability information should not be viewed in isolation but should be firmly integrated into general marketing strategies. For example, companies could incorporate sustainability messages into their advertising campaigns, packaging design and online presence. Our research here suggests that **addressing psychological factors** is supportive of the intention to buy sustainable chocolate:

- Strengthen personal conviction: For effective sustainability messages, it can be helpful to focus on a personal norm based on sustainable values.
- Address an emotional aspect: For example, the premonition of a guilty conscience later can lead to the purchase of a sustainable product. It is important that the negative emotions are linked to the possibility of preventing this situation, for example by choosing a sustainable product.
- Point to a social peer group: As social beings in search of belonging, it could be of interest to consumers to find out which products other customers choose.

Against the background of these fundamental principles, the question arises for SMEs as to how messages should be expressed and what media should be used to deliver them. This is examined in more detail below.



Choice of medium for providing information

Trust in sustainability labels plays a key role in their effectiveness

The use of sustainability labels on chocolate packaging is a common means of communicating information about the social and environmental conditions of cocoa cultivation and chocolate production to consumers. Numerous studies unanimously conclude that visible, trust-inspiring labels with comprehensible certification criteria can influence purchasing behavior.

A high level of trust in compliance with the promised criteria is essential in order to positively influence consumers' attitude toward the product and the brand, and thus their purchase intention and their purchasing behavior. A lack of trust, on the other hand, can be a driving force behind consumers not realizing their original intention to buy a sustainable product. Our research as part of the CoVaCoa project confirmed this central role of trust in the effectiveness of sustainability labels. In a large-scale survey of consumers in organic and conventional supermarkets, we found that trust in a particular label has an influence on the decision to buy chocolate with that label. The greater the consumer's trust, the more likely they are to choose a chocolate with a label of trust rather than one without. We were able to observe this correlation for consumers in both conventional and organic supermarkets and for various social and ecological sustainability labels. In a direct comparison, trust in the Fairtrade label appeared to be higher than trust in the German organic label, and consumers in organic supermarkets tended to report higher levels of trust.

Concise list of sustainability criteria and QR code increase trust in sustainability labels

- One possible way to increase consumer confidence in a sustainability label is to provide additional information about the certified sustainability criteria to ensure they are easy to understand. This can be done, for example, in the form of short, concise key points directly next to the label on the chocolate packaging. In support or as an alternative, consumers can also be provided with a quick response (OR) code next to the label, which promises access to more in-depth information about the certification program and the company's sustainability efforts.
- While, according to our research, the mere provision of written information does not appear to have any influence on consumer trust, a label paired with brief written information and a QR code can increase trust in the organic label as well as in a rather unknown, private fair label. The fact that no one in our study actually called up the QR code suggests that it is not so much the information per se that is decisive for increasing trust, but rather the signaled willingness to be transparent about the production conditions on the part of the company.

- Sustainability labels seem to play a decisive role in the choice of chocolate, especially for consumers in organic supermarkets. However, the presence of a label is only one of many product attributes that influence the purchasing decision. Other relevant attributes, such as the taste of the chocolate, the brand or the price, are of equal or greater importance to the label among consumers in conventional supermarkets.
- Furthermore, for most consumers, buying chocolate is more of a routine than a carefully considered decision. Instead of weighing up all the available options, consumers often go for a product or brand they already know, or always choose their favorite flavor.

Particularly in view of these limiting remarks, SMEs that wish to communicate their sustainability efforts by means of a label should, when **choosing a suitable existing certification program**, take into account not only the respective certification criteria but also the trust that their target group places in the corresponding label. The same applies when considering the **development of a sustainability label**. In the absence of trust, any label runs the risk of being little more than another visual element on the packaging. The desired function of effectively communicating sustainability efforts and guiding purchasing decisions is not achieved.



Conveying living environments via virtual reality experiences can increase willingness to pay

By integrating virtual reality (VR) experiences into the marketing strategy of SMEs, consumers can be given realistic insights into production conditions in remote parts of the world. This can create a better understanding of the local chocolate manufacturer's sustainability efforts. Compared to traditional information channels, consumers can get a more concrete picture of the producers' lives by immersing themselves for a moment in the producers' world.

Our experiments as part of the CoVaCoa project suggest that **VR experiences**, for example in the form of a 360° video about local production conditions, can **increase** consumers' **willingness to pay** for chocolate, regardless of its sustainability characteristics. In addition, the immersive virtual experience results in a more **positive description of people** from a cocoa-producing country like Ghana. By offering a novel experience and providing general insights into the lives of cocoa farmers and their production efforts, VR has the potential to increase consumers' willingness to pay and thus raise funds for the payment of living incomes and the implementation of sustainable production initiatives. From this perspective, the integration of VR elements into marketing concepts can be a valid option toward the successful communication of sustainability information.

Formulating information

Focusing on the negative consequences of unsustainable actions can strengthen problem awareness – focusing on positive consequences strengthens sustainable attitudes

In addition to the choice of medium for **conveying information**, the emphasis placed on the **content of messages** (so-called **framing**) can also be relevant for consumer decisions. For example, when formulating a message, either the positive consequences of action or the negative consequences of inaction can be emphasized, while the actual message remains unchanged.

Example: Framing of sustainability messages:

- The decision in favor of a fair product leads to fair remuneration for producers.
- Deciding against a fair product does not lead to fair remuneration for producers.

By highlighting the negative consequences of consumption decisions, awareness of the topic can be created. Negative information therefore appears to be particularly effective in »waking up« consumers and drawing attention to grievances. As a result, new customers can be attracted to products with sustainability attributes. However, there is a risk that existing customers will find the ongoing confrontation with negative consequences distressing. Especially in the case of chocolate products, which are often associated with positive feelings, this perceived pressure can lead to resistance, or defensive reactions. Negative messages can therefore be an enrichment of the marketing strategy for creating problem awareness, but should be used with caution. In contrast, emphasizing the positive consequences of sustainable action seems to be able to strengthen a positive attitude toward sustainable action among consumers. Depending on the focus of the information used in marketing. SMEs can therefore achieve different effects on consumers. It is important that any negative emotions felt are always linked to an alternative behavioral option - in other words, that there is a way out, so to speak, to end the negative emotional state: for example, by choosing a sustainable product.

No differences due to focus on social or environmental impact

What is interesting in this context is that although the negative framing of the message seems to be particularly relevant, it is not so much the sustainability information that is shared at the content level. Our results suggest that it makes no difference to the promotion of problem awareness, attitudes, sustainable purchasing intentions or the willingness of consumers to pay, whether negative social or negative ecological effects of cocoa cultivation in Ghana or a combination of this information is shared. Analogous to the results concerning the provision of information by means of labels or QR codes, the how once again appears to be superior to the what.



Strategic orientation of political management

Easy-to-understand, state-regulated and mandatory communication of sustainability criteria has the highest acceptance among consumers

At a societal level, the measures presented can be embedded in various governance approaches. This means that various political steering instruments can be used to promote sustainable consumption. Measures can, for example, be regulation, offer incentives or enable consumers to consume sustainably (capacity building).

Support and acceptance among the population is particularly important for the success of corresponding policy design. In this context, our research suggests that capacity-building measures, such as easy-tounderstand, state-regulated and mandatory communication of sustainability criteria on all products, have the greatest acceptance among consumers. This form of political control is superior to regulation or incentivization, for example by means of a reward point system, in terms of acceptance among the population. Transparent, comprehensible, and easy-to-understand communication of sustainability criteria, in conjunction with a QR code, therefore not only increases trust, but also represents a reliable and well-accepted form of information provision for SMEs.

Trust in political actors is key: Integrity is the key to high acceptance and perceived effectiveness of measures

In terms of trust, it is not only important how trustworthy a label itself is, but also how trustworthy (state) actors who use the corresponding governance instruments are perceived to be. In this respect, our results suggest that it is of primary importance how much integrity actors are considered to have, while a facet of trust based on competence appears to be less decisive. Political governance is thus more accepted by consumers and also considered more effective if the actors demonstrate a high level of integrity. Whether they are classified as competent or not plays a subordinate role. This underlines the particular importance for SMEs of being perceived as a responsible actor. Designing corporate activities to be consistently sustainable, communicating this credibly and avoiding negative headlines are key elements in building and continuously strengthening consumer trust.

Selected literature for further reading

Chen, P.-J., & Antonelli, M. (2020). Conceptual Models of Food Choice: Influential Factors Related to Foods, Individual Differences, and Society. Foods, 9(12), 1898. <u>https://doi.org/10.3390/</u> foods9121898

DelPrete, M. & Samoggia, A. (2020). Chocolate Consumption and Purchasing Behaviour Review: Research Issues and Insights for Future Research. Sustainability, 12(14). <u>https://doi. org/10.3390/su12145586</u>

Food and Agriculture Organization (FAO) (2022). Statistical Yearbook: World Food and Agriculture 2022. <u>https://www.fao.org/3/cc2211en/</u> <u>cc2211en.pdf</u>

Food and Agriculture Organization (FAO), & Bureau d'analyse sociétale pour une information citoyenne (BASIC) (2020). Comparative study on the distribution of value in European chocolate chains: Executive Summary. Paris. <u>https://lebasic.com/en/?s=Comparative+study+on+the+-</u> <u>distribution+of+value+in+European+chocola-</u> <u>te+chains</u>

Fountain, A. C., & Huetz-Adams, F. (2020). Cocoa barometer 2020. <u>https://voicenetwork.cc/</u> wp-content/uploads/2021/03/2020-Cocoa-Barometer-EN.pdf

Fountain, A. C., & Huetz-Adams, F. (2022). Cocoa barometer 2023. <u>https://voicenetwork.cc/</u> wp-content/uploads/2022/12/Cocoa-Barometer-2022.pdf

García-Herrero, L., De Menna, F. & Vittuari, M. (2019). Sustainability concerns and practices in the chocolate life cycle: Integrating consumers' perceptions and experts' knowledge. Sustainable Production and Consumption, 20, 117-127. https://doi.org/10.1016/J.SPC.2019.06.003

German Initiative on Sustainable Cocoa (2023). Improve the living conditions of cocoa farmers and their families and contribute to a secure livelihood. <u>https://www.kakaoforum.de/en/#</u>

Ghana Cocoa Board (Cocobod) (2022). Cocobod's Subsidiaries and Divisions. <u>https://cocobod.gh/</u> <u>subsidiaries-and-divisions</u> Ghana Statistical Service (2020). Agriculture and Environment: Agriculture. <u>https://statsghana.gov.</u> gh/nationalaccount_macros.php?Stats=MjM3N-TlyNzgzMy440DU=/webstats/985rp49861

Ingram, V., Van Rijn, F., Waarts, Y., & Gilhuis, H. (2018). The Impacts of Cocoa Sustainability Initiatives in West Africa. Sustainability, 10(11), 4249. <u>https://doi.org/10.3390/su10114249</u>

International Cocoa Organization (ICCO) (2023). Monthly Cocoa Market Report: August 2023. https://www.icco.org/wp-content/uploads/ ICCO-Monthly-Cocoa-Market-Report-August-2023.pdf

International Labour Office (ILO) (2019). Assessing the Employment Effects of Processing Cocoa in Ghana. <u>https://www.ilo.org/wcmsp5/</u> groups/public/---ed_emp/---ifp_skills/documents/publication/wcms_673136.pdf

Krauss, J. E., & Barrientos, S. (2021). Fairtrade and beyond: Shifting dynamics in cocoa sustainability production networks. Geoforum, 120, 186-197. <u>https://doi.org/10.1016/j.geofo-</u> rum.2021.02.002

Leissle, K. (2018): Cocoa. Polity Press.

Observatory of Economic Complexity (OEC) (2020). Cocoa Beans in Ghana. <u>https://oec.world/ en/profile/bilateral-product/cocoa-beans/reporter/gha</u>

Ryan, Ó. (2011). Chocolate nations: Living and dying for cocoa in West Africa. Zed Books.

The World Bank (2019). Towards Sustainable Agrologistics in Developing Countries - Cocoa Supply Chain in Cote D ivoire. <u>https://documents.</u> worldbank.org/pt/publication/documents-reports/documentdetail/735521553488355096/ towards-sustainable-agrologistics-in-developing-countries-cocoa-supply-chain-in-cote-d-ivoire

Value Chains and Consumer Decisions – Remote Effects of Governance and Product Biographies Using Cocoa as an Example

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