CSR AND COSMETIC STANDARDS OF RETAIL CHAINS: AN ANALYSIS OF THE EFFECTS FOR CARROT PRODUCERS. CASE STUDY

Representatives of retail chains emphasize in their statements how much importance they attach to conducting business according to the idea of CSR, especially in terms of limiting the amount of food wasted. On the other hand, when presenting product specifications to food producers, they require them to provide products that comply with specific standards. The aim of this article is to present the potential financial loss for the surveyed producers resulting from aesthetic/cosmetic losses at the stage of primary carrot production. The source material was subject literature, accounting documentation for the years 2019–2022, and information obtained during expert interviews with carrot producers. The size of the losses was presented based on the mass balance index. It was found that only 43.86% of the collected raw material is sold as a full-value product (accepted by retail chains).

Keywords: CSR, cosmetic standards, retail chains, food losses, carrot.

1. RETAIL CHAINS AND CSR – OUTLINE OF THE PROBLEM

Already at the turn of the 20th and 21st centuries, activities in the field of corporate social responsibility (CSR) began to become important in the activities of commercial enterprises. More and more organizations treat the idea of CSR as a way of taking responsibility towards society and the environment and implement it (Božić, Kolić Stanić, Jurišić, 2021). In the literature on the subject, CSR is understood as the organization's responsibility for the impact of its decisions and actions on society and the environment, therefore it should ensure transparent and ethical behavior that:

- contributes to sustainable development, including the well-being and health of society,
- takes into account stakeholder expectations,
- is consistent with applicable law and consistent with international standards of conduct,
- is integrated with the organization's activities and practiced in its relationships (Kowalska, 2016).

1 Maryla Bieniek-Majka, Kazimierz Wielki University in Bydgoszcz, Poland; e-mail: maryla@ukw.edu.pl. ORCID: 0000-0003-1448-7406.
Over the last three decades, the retail sector in Central and Eastern Europe has changed dramatically. The retail market is consolidated and retail chains from Western Europe have a competitive advantage. Their policy focuses on the organization's management process and consumer requirements. According to Mila Kavalić and her team (2019), examples of good practice (in line with the CSR idea) created by retail chains can become a strong positioning factor on the market and have an impact on building and maintaining a competitive advantage in the future.

The concept of CSR and the values associated with it meet the need for conscious consumption. As Marek Drzazga and Urszula Janeczek (2018) emphasize, the comprehensive application of the CSR concept in an enterprise requires the use of appropriate activities and measures at all levels of creating the value chain, starting from purchases through production, distribution, the type of products used, and ending with recycling. Contemporary retail (mainly large-scale retail trade operated by retail chains), due to its scale of operation, financial potential and transaction power, has a significant impact on shaping consumer tastes and preferences, and can therefore have a significant impact on the dissemination of socially responsible practices throughout the supply chain. Katarzyna Kowalska (2016) mentions above all:

- shaping ecological awareness of employees and customers,
- increase in product safety and quality,
- reduction of carbon dioxide emission,
- effective waste management,
- national use of natural resources,
- reducing employee rotation and improving their working conditions.

In relation to the above-mentioned practices, when thinking about the supply of food products, one should recall the model (Figure 1) developed by Xiao Liu and Kuen-Lin Lin (2020), which indicates that in order to maintain food security (by limiting food waste) and obtain safe products/services, both collective belief and joint action are important. In their understanding, the “green” organizational culture of a company is the belief on the basis of which the CSR concept is created and implemented by both the organization's employees and their customers. In their opinion, the company’s CSR activities have a positive impact on the perception of products and the behavior and purchase intention of consumers.

![Figure 1. A model from “green” organizational culture to safe food](Source: own elaboration on the basis of (Liu, Lin, 2020).)
Unfortunately, opportunistic behavior towards the implemented CSR strategies in retail chains may be exhibited by its employees (starting with managerial staff and ending with line workers), who, motivated by the desire to ensure a high level of freshness and customer satisfaction, often contribute to the increase in the amount of food wasted by disqualifying products even though they are suitable for consumption. According to Na Luo, government intervention and food policy may motivate retailers to make efforts and adopt corrective methods, e.g. by improving packaging, storage and display, which may affect the quality, spoilage rate and shelf life of food products. These actions would reduce the amount of food waste (Luo, Olsen, Liu, 2021). However, sometimes internal regulations of retail chains consistent with the CSR concept would be sufficient.

According to Marek Ciesielski (2017), issues related to CSR are often presented in a biased way - as manifestations of altruism. The domination of retail chains over suppliers (mainly small and medium-sized ones) is the basis for building entry barriers. Dominant networks often operate in oligopoly conditions. On the one hand, they compete with each other, and on the other, they pursue a limit price policy. Ciesielski also notes that the dominant retail trade puts pressure on suppliers. This pressure applies not only to the prices paid by suppliers, but also to the so-called unfair practices. These include primarily:

- ambiguous contractual terms,
- lack of written contract (despite legal order [Bieniek-Majka, 2023]),
- changes to the contract with retroactive effect,
- unfair transfer of commercial risk,
- unfair use of information,
- unfair termination of a commercial relationship,
- territorial supply restrictions.

Particularly negative consequences for suppliers arise when chains force suppliers to accept changes in order volumes, even just before the scheduled delivery date, or transfer commercial risk to suppliers by requiring them to collect unsold goods. Unfair practices lead to the same financial consequences as price pressure.

Large retailers (commercial chains) frequently use unfair trade practices in the supply chain and, on the other hand, undertake pro-environmental activities aimed at improving their image (Mayorova, 2021). Recently, there have been several actions carried out by retail chains to support agricultural producers in difficult situations. For example, the campaigns “it's what's inside that counts” and “the second chance of beets” concerned the chain’s purchase of “crooked beets” from a farmer who claimed that their appearance was a consequence of a seed defect. The campaigns “give carrots a chance” and “give vegetables a chance” encouraged customers to buy high-value products that did not meet the criteria of cosmetic standards established de facto by the chain. A carrot producer, who, as in the case of beets, was helped by a retail chain in selling agricultural produce, says that the perfect appearance of vegetables, beautiful color or regular shape are frequent reasons for purchasing a given product or rejecting it if these expectations are not met. Unfortunately, we know that customers are still ruthless in this respect, and that's not how nature works (www.portalspozywczy.pl, 2021).

Lu Shijun and the team (2022), who researched the Chinese market noticed that stringent requirements and irrational consumer preferences (“eye-catching”) regarding size and color often lead to throwing away large amounts of food already in the field or at the stage of primary production, which is reflected in the income of agricultural producers.
2. MATERIAL AND RESEARCH METHODS

The aim of this study is to show potential lost benefits for the surveyed carrot producers resulting from losses caused by the use of cosmetic standards imposed by retail chains that declare responsible business conduct. The source material was the literature on the subject, accounting documentation for the years 2019–2022 and information obtained during expert interviews with carrot producers, which were conducted in January 2023.

The study covered 7 purposively selected producers, whose aggregate volume of carrot harvests in 2021 was approximately 15% of the harvest volume in the Kuyavian-Pomeranian Voivodeship and approximately 2.8% in the country. The surveyed producers had modernized storage facilities, production lines and cars with semi-trailers equipped with refrigeration units. Carrot cultivation and the process of preparation for sale are carried out in accordance with GlobalGAP guidelines. The certificate allows you to cooperate with retail chains, which are the main recipients of carrots prepared for sale. The size of the losses was presented on the basis of the mass balance index (Niedek, Łaba, Szczepański, Krajewski, 2019), i.e. the share of the mass of finished products and the mass of raw material intended for sale as a material for processing or animal feed in the mass of received raw material.

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\text{Losses} = \frac{\text{mass of finished products + mass of raw material for sale}}{\text{mass of raw material received into the warehouse}} - \frac{\text{raw material for processing + animal feed}}{\text{mass of raw material received into the warehouse}}
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The value of potential lost profits was estimated on the basis of the difference between the revenue obtained from the sale of rejected products, and the value of potential revenue obtained assuming that producers could sell 50% of the weight of rejected carrots at the average market price of a product meeting the “standards” with a price discount for imperfect appearance in the amount of 30%, 50% or 70%.

Cosmetic standards and the revenues of carrot producers

Poland with average production in 2019–2021 of approximately 666 thousand tons is one of the largest carrot producers in Europe (after Great Britain and Germany, where the production volume in 2019 was approximately 758 and 791 thousand tons, respectively) (GUS, 2020). The carrot harvest in 2021 in Poland accounted for 16.4% of all vegetable harvests, and 18.5% in the Kuyavian-Pomeranian Voivodeship (GUS, 2022). The volume of edible carrot harvests in 2019–2021 among the surveyed producers from the Kuyavian-Pomeranian Voivodeship increased from 14.7 thousand tons to 17.8 thousand tons and accounted for approximately 15% of the vegetable harvest in the Kuyavian-Pomeranian Voivodeship and 2.8% in the country in 2021. The collected raw material was stored in refrigerated warehouses, then, depending on the size of orders received from customers, the carrots were successively washed, brushed, calibrated, packed and transported to the customer. The main recipients of the finished product are retail chains and wholesalers. Due to the requirements of recipients, specified in the literature on the subject of cosmetic standards, regarding primarily the parameters of carrots (weight 50–250 g, diameter 2–4 cm), some of the raw material with full nutritional properties is rejected as not meeting commercial standards. The sorted carrots are then divided according to size into those below and above the commercial standard. Raw materials with sizes above the norm may be desired by processing plants, while small carrots can be used as food for farm animals (mainly cattle), but also for wild animals (supplied to forest districts and zoos). Carrots
with signs of rotting and turning green are sent to the biogas plants. The carrot mass balance determined on the basis of warehouse and commercial documentation for the surveyed farms showed that in the production phase (from the storage warehouse, through washing, calibration, packaging and transport to the finished products warehouse), raw material losses averaged approximately 19%. They resulted from the natural processes of drying carrots in the cold store, losses during the internal transport phase and during the process of preparation for sale. Carrots for consumption, calibrated and intended for the final customer, constituted on average only about 44% of the weight of the collected raw material, while the share of the collected raw material that was intended for processing was on average about 7% of the total weight. On this basis, it can be concluded that only slightly more than half of the collected raw material was intended as food for humans, the rest was animal feed (on average, about 26% of the mass of the collected raw material) or fuel for biogas plants (on average, about 4%) (Figure 2).

![Figure 2. Structure of carrot harvests according to management method. Average share for 2019–2022 (%)](image)

Source: own research.

In the years 2019–2022, the price (Figure 3) of calibrated carrots obtained by the surveyed producers varied, and interestingly, in the last season it was lower than in other years. However, a higher price this season was obtained from processors for the transferred raw material. The average price of calibrated carrots in the examined period was PLN 1.32, for carrots intended for processing – PLN 0.38, and for animal feed – PLN 0.16. The rejection of carrots for aesthetic reasons and the need for producers to sell them for other purposes reduces the revenues that producers can obtain. In the period under review, the average revenue from the sale of the “off-sort” was approximately PLN 1.11 million. Assuming that half of the raw material rejected for aesthetic reasons could be sold with a price discount of 30%, 50% and 70% from the price of the calibrated raw material
intended for sale. It should also be emphasized that producers are most often price takers, and retail chains are price setters. With the above assumptions, the surveyed producers could obtain revenues ranging from approximately PLN 3.04 million (with a 30% discount), through PLN 2.43 million (with a 50% discount), to PLN 1.46 million (with a discount of 70%). Which means that the revenue figure could be higher by 30% to 173%.

Figure 3. Carrot price depending on the direction of sales in 2019–2021 (PLN)
Source: own research.

Based on the amount of possible revenue, potential lost benefits were estimated, which ranged on average from PLN 0.34 million to PLN 1.92 million (Figure 4). Undoubtedly, the possibility of having greater financial resources would allow producers to increase the profitability of their operations. Retail chains often emphasize that they are socially responsible institutions and that preventing food waste is one of the most important goals of their activities. And in fact, they should be praised for incidentally implemented campaigns that helped farmers reduce financial losses and increase their brand value. But often the actions taken by retail chains may be greenwashing or whitewashing. Greenwashing is the deception of consumers or even societies by companies that pretend to be pro-environmental. Its purpose is to encourage the purchase of goods, increase the importance or value of the brand or simply create a good opinion about the company. The scope of this concept overlaps to a large extent with whitewashing. Both concepts describe activities that are contrary to the concept of CSR (Domański, 2022). Taking into account the role that retail chains play in shaping purchasing processes and influencing customer tastes, we should expect continuous support from producers by “relaxing” calibration requirements and increasing educational activities that change customers’ perception of imperfect-looking vegetables. Vegetables produced but rejected for aesthetic reasons not only result in financial losses for the producer or a reduction in the amount of food available
on the market, but also in unnecessary greenhouse gas emissions (Porter, Reay, Bomberg, Higgins, 2018).

3. SUMMARY

In practice, corporate social responsibility covers a wide range of aspects, such as: care for employees, involvement of local communities, and care for the environment. Assessing whether retail chains apply the concepts of corporate social responsibility (CSR) while setting very stringent requirements for aesthetic standards is a complex issue. On the one hand, positive aspects of the activities of retail chains should be noted, but on the other hand, one may be tempted to say that they have signs of whitewashing or greenwashing. These actions are intended to improve the assessment of their image, and perhaps to drown out reproaches related to the increase in the amount of food that may be wasted or written off due to not meeting high aesthetic standards. Rejecting fruit and vegetables, which are a valuable product, has negative social and ecological consequences. Therefore, it is very important for retail chains, as part of the implementation of the CSR concept, to implement educational campaigns aimed at raising the awareness of consumers and employees about the effects of depreciating food products.

The need for producers to sell a complete product at a lower price, such as feed, means that they are exposed to the loss of potential benefits. Enabling manufacturers to sell less aesthetically attractive products at a price discount can help increase their revenues by 30% to 173%, and this can be reflected in the profitability of their businesses. Moreover, this action may contribute to greater availability of products and better satisfaction of people's food needs.
Rigorous cosmetic standards applied by retail chains lead to negative consequences, which may undermine the overall image of these companies. Ultimately, the assessment of implemented activities as part of the corporate social responsibility of retail chains requires taking into account a broader context.

REFERENCES
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