

Moral responsibility for food waste from the perspective of “structures of sin”. Polish experience reflection

Moralna odpowiedzialność za marnowanie żywności
z perspektywy „struktur grzechu”.
Refleksja nad polskim doświadczeniem

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Abstract: The article presents the food waste problem from the perspective of Catholic social teaching as a socio-economic issue and a moral dilemma, placing it in the context of “structural sin”.

Referring to the history of food security in Poland and legal measures to combat food waste, the author argues that although structural factors contribute to food waste, personal responsibility remains critical, as moral actions are always personal, despite systemic influences.

As a result, characterized by an interdisciplinary approach combining moral theology, law, economics, and environmental ethics, the text offers a thought-provoking look at the problem of food waste, calling for both systemic change and moral transformation.

Keywords: Moral theology of social life; Catholic social teaching; structural sin; food waste; virtue of moderation

Abstrakt: Artykuł przedstawia problem marnowania żywności z perspektywy katolickiej nauki społecznej jako kwestię społeczno-ekonomiczną i dylemat moralny, umieszczając go w kontekście „grzechu strukturalnego”.

Odnosząc się do historii bezpieczeństwa żywnościowego w Polsce i środków prawnych mających na celu zwalczanie marnotrawstwa żywności, autor argumentuje, że chociaż do marnowania żywności przyczyniają się czynniki strukturalne, to jednak odpowie-

działność osobista jest kluczowa, ponieważ działania moralne są zawsze osobiste, pomimo wpływów systemowych.

W rezultacie, tekst charakteryzujący się interdyscyplinarnym podejściem, łączącym teologię moralną, prawo, ekonomię i etykę środowiskową, oferuje prowokujące do myślenia spojrzenie na problem marnowania żywności, wzywając zarówno do zmiany systemowej, jak i transformacji moralnej.

Słowa kluczowe: teologia moralna życia społecznego; katolicka nauka społeczna; grzech strukturalny; marnowanie żywności; cnota umiarkowania

Introduction

Some authors have speculated about the impact of morality on food waste (Misiak et al. 2020; Chang 2021; Lugo-Morin 2024). Christian Bretter provides an overview of scientific research and studies on the moral considerations related to food waste (Bretter et al. 2023). According to Karim Ghani, local authorities should consider citizens' moral beliefs about food when segregating food waste (Karim Ghani et al. 2013). Parizeau demonstrates the impact of ethical standards on food waste (Parizeau et al. 2015), while other researchers posit that only certain demographic groups may be influenced by morality (Hebrok and Boks 2017). However, Bretter's review of research on the matter concludes on a pessimistic note. "Given this promising start, it is surprising that large-scale systematic studies have not been conducted to examine whether morality is significantly related to food waste" – he writes. "Empirically, [...] the notion that food waste can be viewed as a moral issue has received little attention," – conclude British scientist (Bretter et al. 2023, 2).

It was only during the 1974 food crisis that the first attempts were made to formulate the concept of "food security" on a global scale (Obiedzińska 2012, 9-10). The Food and Agriculture Organization of the United Nations (FAO) has repeatedly defined food security, starting from an understanding of it as the continuous satisfaction of people's food needs, coupled with access to food necessary for a healthy life, without compromising the proper functioning of the human body due to inadequate quality. The FAO definition, refined through numerous modifications and additions, ultimately emphasizes four dimensions of food security: 1) Availability of food produced locally and imported from abroad. 2) Accessibility – the food can reach the consumer, and the latter has enough money to purchase. 3) Utilization. The individual must eat adequate amounts in quantity and quality to live a healthy and whole life and realize his or her potential. 4) Stability deals with the ability of the nation/community/(household) person to withstand shocks to the food chain system, whether caused by natural disasters (climate, earthquakes) or those that are

artificial (wars, economic crises). Thus, it may be seen that food security exists at several levels: Availability – National; Accessibility – Household; Utilization – Individual; Stability – may be considered a time dimension affecting all levels. All four of these dimensions must be intact for complete food security.

In other words, food security means that all people have continuous access to adequate, safe, and nutritious food while taking into account personal dietary preferences and needs for a healthy and active lifestyle, which can be achieved through continuous physical, social, and economic support. More recent developments emphasize the importance of sustainability, which may be considered the long-term time (fifth) dimension of food security (Peng and Berry 2018, 1-7). Today, there is increasing emphasis not only on technical issues (such as the need to increase food production while protecting the environment) but also on legal, social, and cultural issues regarding consumption patterns (namely, sustainable consumption), as well as the need to manage the food supply chain to minimize the problem of food waste (Niedek and Krajewski 2021, 17-28).

Food waste contradicts ethical principles, including respect for human life, health, labor, and environmental well-being. In addition, food waste undermines social values of solidarity and responsibility for the common good. Finally, it contradicts economic principles of efficiency and economy. Nevertheless, the dynamics of food waste remain high in some regions of the world (Bednarczuk and Śleszyński 2019, 19-30). The effectiveness of international agreements and regulations to prevent this is insufficient. Considering the issue from the perspective of Catholic social teaching, one would have to ask whether food waste can become a “social sin” similar to slavery, apartheid, discrimination based on race, gender, or religion, exploitation of workers, and insufficient availability of education and health care for poor and marginalized groups. Under conditions of such “structural sin,” do consumers make decisions to waste food consciously and voluntarily, despite their awareness of the harm such choices cause, or is this freedom limited by unjust market mechanisms, social and institutional structures that perpetuate bad habits and choices, and thus inequality and suffering?

I. Context: Example Polish

The poet Cyprian Kamil Norwid (1821-1883), one of the most influential Polish artists and a national bard, in 1844, while away from his homeland, began his poem “My little Song (II)” with the following declaration: “For the beloved country, where only a crumb of bread / From the earth with reverence we lift, / Worshipping such a boon through Heaven spread / O Lord,

I ache...” (Norwid 1844). His first and primary association with his homeland, country, and nation was respect for bread and food. Indeed, the community to which he longed and for which the poet yearned was characterized by an extraordinary respect for food.

Estimation of “God’s gifts” was widespread in Poland until the late 1980s, when Communist Party rule and a deeply inefficient state economy plunged citizens into severe poverty. The reverence for food was influenced by two key factors: cultural, rooted in Catholic and peasant traditions, and economic, resulting from strict rationing of goods, services, and food. After World War II, a food rationing system was introduced in Poland in three different periods: 1944-1949, 1951-1953, and 1976-1989, in each of which the acquisition of certain goods at official prices, according to specific rules, was regulated by the government. The specific rates depended on occupation, age, health, and place of residence. At the height of rationing, purchasing goods for children, the elderly, and people with disabilities required special documentation for each purchase. Such documents were needed to confirm and officially record each transaction. In contrast, during the final period of rationing, restrictions on distribution included sugar, meat and meat products, butter, flour, rice, groats, soap, washing powder, chocolate, alcohol, gasoline, vegetables, coffee, tea, vinegar, salt, matches, spices, breakfast cereal, candy, stockings, tools, household appliances, and other goods, basically almost everything.

Since the 1990s, after Poland transitioned to a free market economy, efforts to guarantee “food security” and “food safety” have increased (Kapusta 2016, 84). Concern for “safe food” gradually became more pressing, and the growth of the contaminated food market demanded legal solutions (Sygit and Wąsik 2021, 55). With economic growth and competition, along with the expansion of big-box stores and the ease of foreign trade regulations, there was a gradual increase in food surpluses. As a result, in 2003, the food market experienced oversupply for the first time. Implementing free-market policies and regulatory consolidation impacted Poland’s fulfillment of four food FAO’s security criteria. First, the national food economy began to meet the basic needs of citizens (condition of food availability). Second, the food supply’s stability and reliability were guaranteed, providing food for “economically vulnerable” households and their members. Third – the possibility of economic access to a stable food market has provided food security to even the most financially vulnerable families and their members through various forms of food aid. Fourth – food has begun to universally meet the criteria for nutritional healthiness, which depends, for example, on the level and proportion of nutrients and the content of contaminants (Kapusta 2017, 162).

2. The Extent and Nature of Food Waste in Poland

It is widely believed that food throwing is a problem in developed regions. Food is readily available there, and people often buy it in excess due to their preferred lifestyles, susceptibility to advertising, and financial ability. While the mechanism of such consumer behavior helps wind the spring of the free-market clock, it is not without negative consequences for society, the economy, and the environment: it exacerbates poverty and social inequality while increasing food consumption and costs, burdening the environment and contributing to climate change. The Intergovernmental Panel on Climate Change's report links "food waste" to consumer habits and "food loss" to inefficient production and distribution chains: inadequate technology, insufficient skills, knowledge, and management capacity of supply chain actors, inadequate or intermittent food storage infrastructure, and restrictions on market access (IPCC 2022, 437-550). The Federation of Polish Food Banks (FPBŻ) defines food loss and waste as "all products – processed, partially processed or unprocessed – intended for human consumption or anticipated for human consumption but not used for their intended purpose. That includes every stage of the food chain, from primary production through processing and distribution to consumption" (FPBŻ 2012, 2). The mechanism that regulates ethical and desirable behavior in the interest of the common good is the law. The European Commission has long been committed to combating food waste and considers legal strategies a pivotal way to influence agri-food market regulation. These regulations aim to increase production efficiency, reduce costs, and minimize the environmental impact of food production and consumption. Action in this regard, both by member states and the EU as a whole, was assessed in 2020 by the German Presidency of the Council of Europe. In its assessment, the most effective approach is combining a pan-European strategy with mechanisms member states implement. Establishing national strategies, approving legislative and non-legislative projects, and implementing consumer awareness campaigns were considered particularly important (EU Council 2016).

European regulations have been adapted to Polish conditions in the Law on Preventing Food Waste of July 19, 2019. It defines food handling rules and obliges retailers to prevent food waste and mitigate its adverse social, environmental, and economic effects (Dziennik Urzędowy 2019). These regulations should be of great importance to Poland, as recent studies show that nearly 5 million tons of food are wasted in the country annually, most of which comes from households (60%). Processing and agricultural production account for about 16% of wasted food, and stores for 7%. Thus, nearly 337,000 tons of food were wasted in trade in 2022. A typical Polish household of four throws away about €2,900 worth of food each year. This amount is even high-

er if we consider inflation, which exceeds 22% per year for food products. It should also be taken into account that, according to a survey conducted by Food Banks 2022, less than 9% of Poles accurately estimated the value of the food they waste (FPBŻ 2022). According to a report by the Supreme Audit Office (NIK, Najwyższa Izba Kontroli) in the second half of 2021, the Polish law against food waste needs to be amended, as it does not fulfill its function and does not create a comprehensive system to reduce the scale of the problem effectively (NIK 2021).

Would donating surplus food to charities and NGOs dedicated to feeding the most needy be the right solution? Current regulations allow food suppliers to offer food items to NGOs that might otherwise be discarded due to expiration, proximity to the minimum use-by date, or concerns about product or packaging defects. Participating stores donate unsold food to designated NGOs that meet the requirements of the regulations. Such food can, therefore, only be distributed to specific charities approved by the legislature and cannot be given to institutions such as orphanages or nursing homes.

3. A significant Example

In early September 2010, a trial began against Waldemar Gronowski, the owner of a bakery in Legnica. Gronowski was a distinguished philanthropist honored by the authorities of Legnica with the title of Sponsor of the Year 2004. He donated unsold bread to charity, including a parish canteen for people experiencing homelessness. However, Gronowski needed to keep records of the distributed food, falsely assuming that the donation of bread could be treated as a liquidation of goods. As a result, he did not pay tax on the donated bread, remaining under the belief that he was not obligated to do so since he did not receive any income. The baker pointed out the nonsensical nature of the regulations since discarding the bread would have allowed him to comply with the law entirely.

Gronowski appealed the unfavorable decisions of the tax authorities first to the Regional Administrative Court and then to the Supreme Administrative Court. Despite this, his bakery went bankrupt due to significant financial arrears to the state. The court acknowledged that Waldemar Gronowski's actions were altruistic, beneficial to society, and highly appreciated, but it considered the equality of everyone before the law as an overriding value. In the operative part of the verdict, the judge stressed that donations to social organizations are permitted in Poland, and the government offers tax relief to individuals or entities that support such organizations. However, the condition for donating

and taking advantage of the relief is that the contributions are appropriately registered (Greser 2010).

“The Gronowski case” led to a revision of existing regulations, had a significant impact on the media and public opinion, and aroused the interest of politicians. The court’s verdict and the imposition of fines on the baker caused confusion and public tension. From the point of view of the law, negligence in the management of the goods register justified the conviction. However, the negative perception of the court’s “heartless” decision left a lasting social imprint. Business people saw the case as a punishment inflicted by the state on private entrepreneurs for socially valuable activities. Despite the changes in the law, in 2020, a decade after the high-profile ruling in the Legnica baker’s case, Polish NGOs collected only a little more than 18,500 tons of food from traders and vendors, representing only about 0.4% of food wasted in Poland annually and about 5.5% in trade (GIOŚ 2021, 34-37; NIK 2021, 16; FPBŻ 2020; Czasak 2022).

The Polish example proves that food waste has an important moral dimension, which, although often overlooked, is fundamental to human-society-nature relations analyzed from the perspective of Catholic social teaching.

4. Postulated institutional changes to reduce food waste

In July 2021 the Chief Inspector of Environmental Protection (GIOŚ) found that the July 19, 2019 law contributed to reducing the scale of the food waste problem in Poland. Among other things, the new regulations reduced the amount of organic waste, translating into a reduction in methane emissions into the environment due to mismanaged bio-waste. However, current regulations are insufficient to effectively deal with this problem (GIOŚ 2021, 12). Above all, Poland lacks a comprehensive system for monitoring and reducing food waste. Therefore, changes in the law are needed, which should precisely determine (1) definitions of “food waste” and “food vendor”; (2) the accounting period for determining the amount of revenue; (3) legal measures to penalize food vendors who fail to fulfill their contractual obligations within a specific timeframe or fail to conduct education and information campaigns; (4) procedures for registering establishments under a free food donation agreement, which will allow them to donate more food products to charitable organizations (GIOŚ 2021, 16).

Polish food banks and NGOs advocate comprehensive changes (Wielicka-Regulska et al. 2018, 395-405). They call for expanding the list of durable products that do not require a minimum shelf life. They propose the intro-

duction of clear markings on the front of the packaging, indicating expiration dates and storage instructions. They recommend implementing technological solutions for mass shelf-life monitoring of consumer products (e.g., using dedicated software and QR codes). They support mandatory donation of unsold food by farmers, producers, distributors, and the food service industry to social causes.

Food banks claim that expired food can be processed into bioenergy or compost. They point out that modern technologies allow wasted food to be used as raw material for packaging, clothing, or organic ingredients. They remind us that there should also be more opportunities to sell food that, while not meeting quality criteria, is safe for consumer health, such as imperfect fruits and vegetables. They point out the need to work on new types of food packaging that would extend the shelf life of products. It is possible to use modern technologies to extend the shelf life of products, such as installing refrigerators with systems that regulate humidity levels depending on the product being stored. There are also frequent calls to strengthen the role of community organizations in managing unsold food by streamlining their operations and networking (FPBŻ 2021).

The vast majority of these demands and suggestions are purely technical and organizational. Personal and intentional factors and axiological considerations are not taken into account here. Meanwhile, numerous studies indicate that moral attitudes and shopping habits significantly affect the food wasted. When individuals view throwing away excess food as morally wrong and contrary to their positive self-esteem, the amount of food they waste decreases. Similarly, responsible shopping practices that prioritize buying what is needed rather than stockpiling result in a reduction in food waste. Therefore, to reduce household food waste, it is necessary to look for technical solutions, promote healthy moral attitudes toward food waste, and warn consumers about the adverse effects of excessive shopping (Aydin and Yildirim 2021).

5. The moral aspect of the issue – structural sin and the call to conversion

The conviction that social sin exists stems from the experience and recognition of evil in the world and its impact on individuals and society (John Paul II, 1984, 16). Internal factors, such as habit, and external factors, such as coercion, can influence a person's morally wrong choices. Under certain circumstances, these can partially limit freedom of choice and, thus, personal responsibility and guilt. Nevertheless, sin is always and remains an act of the person.

To express this phenomenon, John Paul II used the term “structures of sin.” ‘Sin’ and ‘structures of sin’ are categories that are seldom applied to the situation of the contemporary world. However, one cannot quickly understand the reality that confronts us unless we name the root of the evils that afflict us” (John Paul II 1987, 36).

In his interpretation, “social sin” encompasses three dimensions: 1. All individual sins have some social impact; 2. Some personal sins are deliberately aimed at other people; 3. Individual sins are aimed at relationships within and between different human communities.

These three dimensions of “social sins” are not the same as “structures of sin,” but they can contribute to them. John Paul II argued that personal sins result in social sins and contribute to building and maintaining structures of sin (Piwowarski 2000, 461-463).

The source of the structures of sin is the weakness of the human will, vices, mental burdens, the tendency to harm others, and the fascination with evil, but all these negative states and inclinations are not yet structures of sin. The latter objectively exist and operate as social constructs – institutions, established patterns of social action, organizations, or sets of institutions. It is not psycho-physical structures but precisely these social constructs that constitute structures of sin. Such structures of sin exist in various social domains, encompassing society, the economy, politics, and culture, both at the global and hidden levels (Nolan 2007).

In the context of the examples cited above, questions arise: In the case of food waste, are there structures of sin of an economic, political, legal, and cultural nature, manifested in globalization, free market design, advertising pressures, and lifestyles so entrenched that they remove at least some of the moral responsibility for food waste from individuals? Does the law contribute to and sustain “sin structures” if legislative measures to combat food waste are inadequately applied or flawed? Questions also arise about protecting against the creation and perpetuation of structures that promote sinful behavior.

Catholic morality warns against social sins and structures of sin by emphasizing individual responsibility for dealing with moral dilemmas. However, one should strive to protect conscience, that is, to prevent situations in which a person is forced to make decisions that collide with morality and law, ethics and economics. Longchamps de Bèrier writes, “The warning against structural sin and the creation of a structure of evil reminds us [...] of the responsibility of putting someone before a difficult choice. The demand to avoid creating similar dilemmas at all costs seems fully justified. While regulations will not take care of everything, the voice calling for remedying problems with legal tools is the fruit of sound intuition. It is up to man to find remedies: these or others. He is morally responsible for their creation and their absence. That is

also the case when he participates in the structures of sin. It is because sin cannot be reduced to the perspective of a structure – its perspective is always personal, as it results from specific behavior in a given situation. Thus, even when it disintegrates with structural sin, responsibility is always personal” (Long-champs de Bèrier 2013, 776-777).

When considering whether food waste should be classified as a structural sin, it is also important to remember that “structural sin” or “sin structures” are theological rather than sociological concepts. These concepts cause distress in individuals, ultimately leading to conversion. Even if a person believes he or she is morally sound and unaffected by painful remorse, external forces can distort his or her conscience. It is essential to realize that every personal sin has its social repercussions. It is committed against others and the community as a whole. Social sin results in structural sin, in which the institution mandates doing evil or deprives one of the opportunity to do good. The Church’s social teaching does not specify this concept, which can follow various socio-anthropological trends in operationalization and conceptualization. Instead, it constantly calls on individuals to follow the path of the Gospel. The resulting actions have a deeper motivation than pragmatic actions, mainly related to horizontal reasoning.

Pope Francis has repeatedly addressed this topic, especially in the context of pastoral care and catechesis. He noted that after feeding and satiating the crowd, Jesus instructed the apostles to “gather the leftovers so that nothing would go to waste.” The Pope also urged everyone not to waste leftover food, asking: “What do you do at home with the food you have not eaten? Do you throw them away? No!” (Francis 2018).

This papal call for examining conscience is also reflected in the official position of the Holy See and Francis’ activity in international forums (Francis 2022). For example, in a message sent to the World Food Program in November 2019, the Pope called for support for the UN agency’s global campaign to eliminate food waste by adopting a different lifestyle. “If we want a future in which no one is left behind, we must create a present that strongly opposes food waste,” – he said. “By combining resources and ideas without delay, we can cultivate a lifestyle that respects the importance of food.” The paradox of abundance leads to superficial, careless, and selfish attitudes that facilitate a throwaway culture. The responsibility lies with international organizations, governments, and individuals. “Families, schools and the media,” – he said, “play a key role in educating and raising awareness” (Gomes 2019).

Conclusion

Christian morality can improve focus, clarity of vision, and ethical behavior on a global scale. It emphasizes the importance of horizontal and vertical human relationships, the concept of responsibility and non-coercive solidarity based on humanistic and religious motivations, the practical application of the principle of subsidiarity, and the clarification of the principle of universal purpose and sustainable development. Long-standing practices of Christian spirituality are being re-examined and defended, combining qualities of restraint with respect for the wonder of creation.

Harmful trends associated with excessive food waste at all stages of development, provision, and consumption call for adjustments to existing economic, political, social, and legal frameworks. These adjustments should encourage autonomous and philanthropic choices on the part of each individual, oriented toward the common good. Above all, such a transformation requires axiological and ethical changes, particularly in shaping lifestyles and establishing responsibility and solidarity in purchasing and handling food in one's own home.

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