

INNOVATION, WORK, SOCIETY

WASTE SORTING IN A FRONT-LINE CITY:
OPINIONS OF KHARKIV RESIDENTS**Artem Lytovchenko**

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Summary

The article is devoted to the analysis of the problem of social attitude towards waste sorting in exceptional conditions. The author considers this problem within the framework of the general problematic of positions and practices of environmental consumption. The focus of the study is the peculiarities of attitudes towards environmental waste management practices in atypical conditions. The article examines Kharkiv as a front-line city in which military security threats come to the fore, create additional threats to food security, and at the same time disguise them as less important. The goal is to find out how mass consciousness in war conditions distributes empirical material for analysis – an online survey of 309 Kharkiv residents. The results of the study show that a positive attitude towards environmental waste sorting practices has been formed in the minds of Kharkiv residents. However, there is a gap between the declarative level of attitude and the implementation of practices. This gap can be explained both by the lack of a materially designed environment for the formation of sustainable waste sorting practices, and by the shortcomings of the information environment. At the same time, military living conditions in a front-line city do not affect the opinions of citizens about the importance of waste sorting.

Key words: eco-consumption, waste sorting, zero waste, Kharkiv, public opinion, practice, declarative gap

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1. Introduction

The issue of environmental consumption in modern cities has attracted the attention of both the Ukrainian public and Ukrainian researchers since the beginning of the 2000s of the twenty-first century. At the same time, the number of sociological publications on this topic is relatively small. In some cases, the authors only indirectly address the social aspects of environmental consumption, focusing on the food and environmental security of the state (see Starychenko 2018; Boiko & Boiko 2022; Skydan, Hrynyshyn 2020). Research interest in the topic has grown in connection with the pandemic: some sociologists analyzed the problems of environmental consumption in the specific practical context of waste recycling in collaboration

with public organizations (Kul'chyts'kiy 2020); others studied the sociocultural level of the problem (Komykh 2020). However, these studies and publications remained isolated in Ukrainian sociological discourse. Meanwhile, the events of February 2022 sharply aggravated the relevance of the issue of environmental consumption for the whole of Ukraine, and especially for front-line cities, in particular for Kharkiv.

As we already pointed out in an article about urban farming in Kharkiv (Lytovchenko & Nekhaienko 2023), Russia's military actions against Ukraine became the final link in the chain of events of a large-scale food crisis, making this crisis irreversible. This crisis is unfolding in different dimensions and at different levels. For Ukraine, it is embodied: 1) in macroeconomic problems such as the difficulty of international transportation of agricultural products; 2) in the difficulties of specific agricultural activities caused by mining of fields and soil contamination by shell fragments; 3) in micro-level food safety violations faced by residents of border settlements. In our previous publication, we already indicated that for Ukrainian citizens the slightest deviations from a stable picture of food supply turned out to be a completely new challenge; For Ukrainian sociology, the need to study this problem field became an equally new challenge. In that article, we illustrated the sociological potential of the issue with an analysis of urban farming in front-line Kharkiv. This time we turn to the non-obvious social, group and personal aspects of food safety in a front-line city, namely the issue of environmental consumption.

We call this issue "non-obvious," meaning the point of view of the masses, not the experts. We mean that the masses are confronted directly with the problems of healthy eating or food supply, and because of this, they are more likely to problematize them in their consciousness. However, higher-level difficulties, such as the long-term consequences of disruptions in waste collection and recycling chains, are much less visible to the masses at the initial stages of problematization. That is why it is important for us to find out what the current ideas of Ukrainian citizens are about those problems of environmental consumption that are "hidden" behind more obvious and urgent violations of food safety (the threat of hunger, supply deviations, etc.). The insufficient level of problematization of waste recycling entails a low degree of participation of citizens in improving the environmental friendliness of this area, which jeopardizes all the goals of environmental consumption at the general social level. Residents of front-line Kharkiv today continue to face the challenges of war (threats of missile strikes, logistics disruptions) – which hypothetically mask second-order problems, such as waste recycling. Therefore, we consider Kharkiv to be an indicative research site in this case.

So, our goal is to determine the attitude of residents of a front-line city to such an aspect of environmental consumption as rational waste recycling. For this purpose, within the framework of the project FUSILLI (this project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 101000717) we surveyed 309 adult residents of Kharkiv and the region in October-November 2023 using a spontaneous online sample; method – formalized online survey. The representativeness of the survey results is limited due to the specifics of the selection of respondents; there is no point in applying statistical procedures; therefore, we consider our study as exploratory. However, the results of our survey are indicative as a reflection of individual elements of the position of Kharkiv residents on given topics (without taking into account the stability or correlation of these elements). Based on the analysis of the results, it is possible to determine areas in which it makes sense to conduct further clarifying research.

2. Results

Let us immediately pay attention to the high assessment of centralized waste removal: 65% note that waste is removed regularly, 27% indicate that sometimes delays occur; Less than 5% of citizens chose negative answer options (Fig. 1).

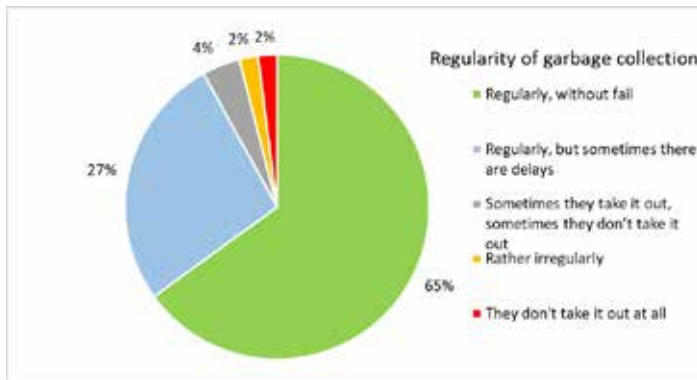


Fig. 1. Regularity of waste removal

This suggests that the general municipal waste management policy is quite effective. Accordingly, all possible problems of environmental waste processing will have a specific nature. We can consider them a consequence of inattention specifically to this aspect of waste processing, and not to the problems of waste management as such.

In this regard, we emphasize that Kharkiv residents' assessments of the organization of waste sorting at the municipal level differ markedly. 43% have never seen special containers for different types of waste; only a quarter of all respondents note that such containers are located right in their courtyards of apartment buildings (most often these are mesh chambers for collecting plastic), another 13% have seen them in neighboring courtyards. The remaining 19% know that there are such containers somewhere, but they have no idea where exactly (Fig. 2). This means that we can add them to the first group. As a result, more than 60% of citizens are guaranteed to have no access to waste sorting at the municipal or house management level. The difference with the general organization of waste removal is obvious.



Fig. 2. Availability of special containers for sorting waste in the area

At the same time, unique and revealing results provide answers to questions about collection points for secondary raw materials (glass, plastic, waste paper, scrap metal). On the one hand, the vast majority of respondents (almost 80%) know about the existence of such points: some see them in close proximity to their homes; others know where they are located in the city. Only 21% have never encountered such items in principle. Nevertheless, at the same time, almost 80% have never used recycling collection points (see Table 3).

Table 3

Recycling collection points*

	Availability		Usage
Is in my yard	4%	I sold raw materials for money	9%
Available in neighboring yards	32%	I gave away raw materials for free	12%
There is, but I'm not sure where	43%	Never used it	79%
I've never seen anything like it	21%	*data in % of all respondents	

This gap between awareness and action is very telling. It is unlikely that we can explain it by the lack of need for the majority of Kharkiv residents to use recycling collection points. As we have already noted, the majority of respondents do not have access to municipal or household containers for separate waste collection. This means that they cannot even throw away plastic and glass waste separately. Consequently, at a minimum, a significant part of the population of Kharkiv has a need for collection points for plastic and glass waste. Another question is whether Kharkiv residents are aware of this need. The gap between the level of awareness of the availability of recycling collection points and the frequency of use of these points suggests that they are not aware.

This gap corresponds to the situation with a personal approach to waste sorting (see Fig. 4).

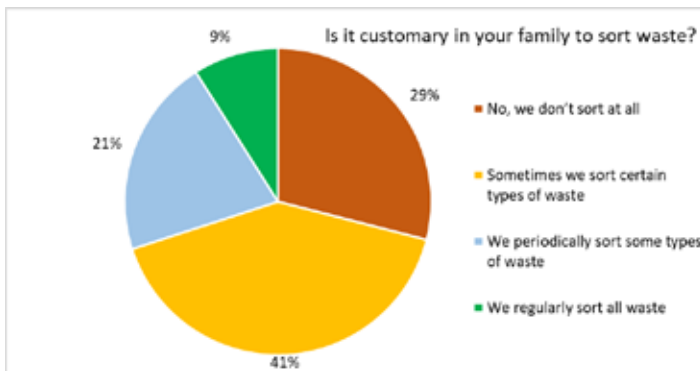


Fig. 4. Family waste sorting

Less than ten percent regularly sort garbage, while almost thirty percent do not sort garbage at all. Certain types – glass, paper and metal waste – are sorted by 41% of respondents; but they do this only sometimes. These results show that there is social potential to encourage waste sorting. It is quite possible that an important factor is the level of meaningful information about the meaning of waste sorting and what possibilities of such sorting exist in the city. The difference between the answers to the question about the availability of recycling collection points

and the question about their use perhaps shows that Kharkiv residents do not always grasp the connection between the points and their sorting capabilities.

We can partly verify this hypothesis based on the results of respondents' responses to a series of statements dedicated to attitudes towards waste sorting (see Fig. 5).

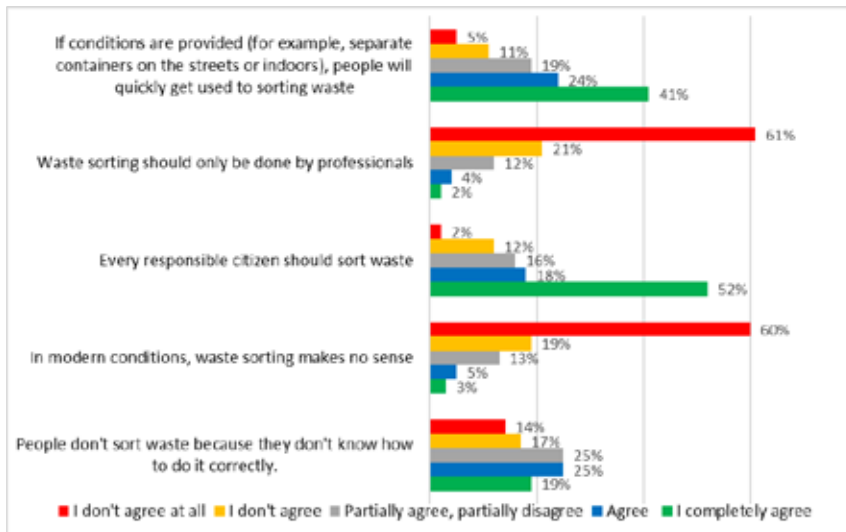


Fig. 5. Respondents' attitude to theses about waste sorting

Let us pay attention to the statement “If conditions are provided (for example, separate containers on the streets or indoors), people will quickly get used to sorting waste.” The vast majority of respondents – a 65% – agree with this statement in a varying degree. Only 16% disagreed. This is a clear illustration of the readiness of city residents for environmental waste recycling practices, given the availability of objective opportunities. Even more – 82% in a sum – of respondents do not believe that “only professionals should be involved in sorting waste”; 70% believe that “every responsible citizen should sort garbage.” Kharkiv residents do not support shifting responsibility for waste sorting to specialized organizations – this is another argument in favor of the social potential of waste sorting. The realities of war are not a reason for Kharkiv residents to abandon waste sorting: 79% of respondents believe that modern conditions do not make waste sorting meaningless.

We see in these responses an indication that conditions exist for the formation of sustainable mass practices of waste sorting even in the military conditions of a front-line city. Note that the first statement included the word “get used to”: it is the formation of a habit that becomes the basis for the sustainability of practices. We saw earlier that the presence of collection points for secondary raw materials is not a self-sufficient incentive for their use by Kharkiv residents. We hypothesized that this may be due to a lack of awareness. However, the number of people who agree and disagree with the statement “People don't sort waste because they don't know how to do it correctly” is not as radically different as with other statements: 44% agree, 31% disagree, and 25% of those who are undecided answer. This cannot be said to clearly support our hypothesis of a lack of awareness. Perhaps the reason is more prosaic: the reception points are not conveniently located and require special actions. While the presence of containers in courtyards or in store premises makes it possible to root regular practice in everyday life.

However, information about the possibilities of environmental consumption in general is still far from perfect. Thus, a little more than ten percent know about specific initiatives for environmental consumption in Kharkiv. Despite the fact that this was an open question (for which such a result is not clearly low), this is additional evidence of an insufficient level of information. Leveling up can be expected to have an effect. We have already noted the potential for expanding the number of carriers of environmental practices in relation to waste. Let us give another example. 65% of respondents indicated that they would choose a product in eco-friendly packaging if the price was the same as the price of a product in regular packaging. At the same time, only 15% consider price more important than packaging, and they will choose a cheaper product. The same percentage of respondents will choose environmentally friendly packaging regardless of price. In itself, this figure is not very high; however, the first 65% can also be targeted by stimulating their choice through non-price methods.

3. Conclusions

Let us summarize. The majority of Kharkiv residents declare a positive attitude towards rational waste recycling. They consider it necessary even in military conditions in a front-line city. At the same time, Kharkiv residents are not inclined to completely shift responsibility for such processing to city services or professionals, but consider it necessary for every citizen to participate in different stages of processing. However, at the same time, the vast majority of Kharkiv residents do not practice even the simplest elements of rational waste processing, such as sorting. The discrepancy between the declarative and practical levels, in our opinion, can be overcome by intensifying information work. At the same time, excessive promotion of the environmental consumption agenda and, in particular, waste recycling can cause rejection. Mass consciousness has elasticity, and in response to obvious pressure, it can react contradictory.

The results of the survey suggest that the formation of sustainable environmental waste sorting practices through the creation of everyday accessible elements for organizing such sorting – for example, special containers in immediate access – is of particular importance. This hypothesis needs further empirical testing.

We also suggest, based on our previous research, that an integrated approach that combines aspects of environmental consumption such as recycling and urban farming may have some promise. In urban farming, typical urban resources – organic waste as well as city wastewater – can be used to grow organic vegetable products. This approach could be an important component in information campaigns to promote green consumption in a frontline city that faces immediate food safety threats.

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