

# Sustainability in Times of Crisis: Consumer Perceptions on Sustainability Aspects and Resilience of Food Production Systems in Germany during the Russia-Ukraine War

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**Abstract** - The Russia-Ukraine war dominates the daily lives of people in Germany since February 2022, the economic and social impacts are not yet clear but expected to be far-reaching. Against the background of the multiple ongoing crises, one could expect that sustainability aspects lose importance for people. However, during the corona pandemic, sustainability aspects have become even more important for parts of the society. Therefore, this article examines the impact of the current war on consumer attitudes towards sustainability aspects as well as the perceived crisis resistance and resilience of national food production systems in Germany. Based on an online survey, 1470 subjects were interviewed. It can be seen that regional food systems are more strongly supported even though a high number of respondents do not see German agriculture as well positioned for times of crisis. Low food prices are currently the most important aspect for people when buying food, with sustainability aspects being currently the priority for fewer people.

## INTRODUCTION

While the consequences of the Corona pandemic have not yet been overcome and the climate crisis is more relevant than ever, a third big crisis - the Russia-Ukraine conflict - dominates the daily lives of people in Germany and worldwide. Many people are concerned not only by the shock of an actual armed conflict in Europe but also by the associated economic and social consequences. During the corona pandemic, it became clear that sustainability issues are very important to many people, even in times of crisis (Busch et al. 2021). Aspects such as regionality, healthy food, as well as climate and environmental protection have even become more important to parts of the population (Busch et al. 2021; Dangelico et al., 2022). However, against the background of the war and the resulting price increases for energy, but also for food products, it is questionable to what extent these developments will continue or perhaps even develop in the opposite direction. Therefore, this article examines the impact of the current war on consumer attitudes towards sustainability aspects and the perceived crisis resistance and resilience of national food production systems in Germany.

## METHODS

The study was conducted in April 2022, 8 weeks after the start of the war. 1470 people were interviewed. The subjects were recruited via an online access panel provider (gapfish). The sample is representative of the German population in terms of age, gender, education and regional distribution. The questionnaire

was adapted from Busch et al. 2021 to compare current consumer behaviour with that during the Corona pandemic. This paper will focus on the questions about sustainability aspects regarding food purchase behaviour, as well as on perceived resilience of food production systems and crisis resistance of the German agricultural system.

## RESULTS

By now, data analysis is not completely finished. We focus at this point on the descriptive results of the data.

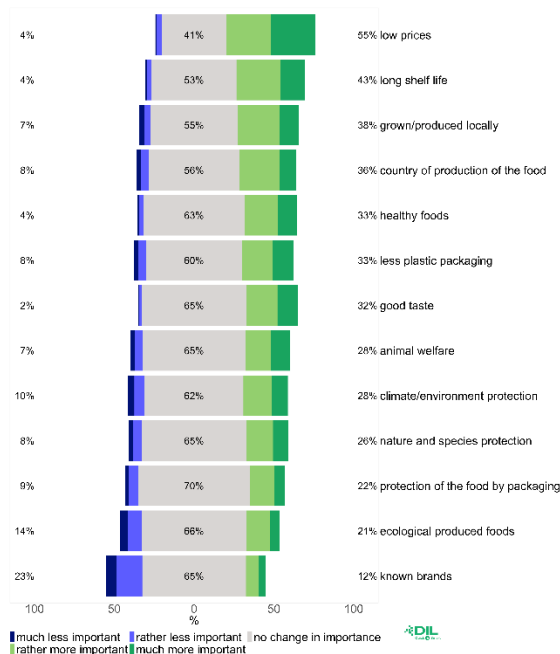


Figure 1: Change in the importance of different aspects of food purchase due to the Russia-Ukraine conflict.

When it comes to different aspects that have become more important or less important to people when buying food due to the outbreak of the war, it can be seen that for all aspects except the "low price" aspect, more than half of the subjects answered that the importance had not changed (see Figure 1). The aspects that have gained importance for a part of the respondents are "low prices" (56%), "long shelf life" (43%), "regionality" (39%) and "country of origin of the food" (36%). Sustainability aspects such as "climate and environment protection" (28%), "animal welfare" (28%) "nature and species protection" (26%) have gained in importance for almost one-third of the respondents and only for just about 10% have

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these aspects become less important. The aspects that have the largest share of decreasing importance are "brands" (23%) and "organically produced food" (14%) (all Figure 1).

When it comes to balancing economics and sustainability, 34% of the respondents agree with the statement that supporting the economy in times of crisis takes priority over climate and environmental protection. However, this is also contrasted by 43% of respondents concerned that environmental and climate protection and animal welfare (38%) will become less important in society due to the outbreak of war.

In addition, the respondents were asked about their assessments of the resilience of national, regional and global food systems to crises in order to see whether these might change under the impression of the war. The results showed a high amount of support for strong regional food supply chains in general. Respondents agreed relatively strongly that Germany should cover its demand for basic foodstuffs through its own agriculture (84%) and that a minimum quantity of these should always be covered by national agriculture (84%). 79% also agreed with the statement that policy should provide incentives for a diverse agriculture system. However, when it comes to the resilience and resistance of the German food production system 42% of the respondents think that German agriculture is not well positioned for times of crisis, and 34% also disagree that the agricultural sector will emerge stronger from the current crisis.

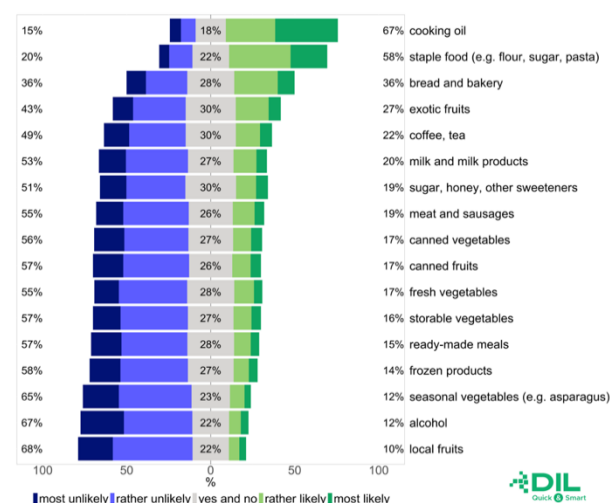


Figure 2: Expected food shortages in the near future due to the outbreak of war

The likelihood of food shortages in the supermarket in the near future is considered most likely by over half of respondents for cooking oils (67%) and staples such as flour, sugar and noodles (58%). The majority of respondents, on the other hand, consider this most unlikely for domestic fruits as strawberries (68%), alcohol (67%) and seasonal vegetables such as asparagus (65%) (see Figure 2). Those who expect food shortages see as the main reasons for this panic buying of others (86%), restricted agricultural production in Ukraine (83%) as well as increased food prices (83%).

## DISCUSSION & CONCLUSION

The Corona pandemic made the global and multi-layered effects of human activity more visible and thus boosted many people's awareness of sustainability. Compared to the results that we found in this study, in November 2020 a significantly larger proportion of respondents indicated that sustainability issues (e.g. "nature and species protection" (48.8%), "animal welfare" (47.7%), "climate and environment protection" (45.3%)) have become more important to them as a result of the pandemic (Busch et al., 2021). It seems that due to the high prices for food caused by the high inflation and the resulting price increases since the outbreak of the war, sustainability aspects have at least partially receded into the background. Concerns about food shortages are in this study also rated more likely in individual product groups than during the pandemic (November 2021 e.g. staples (21.6%), bread and bakery (9.0%)) (Busch et al. 2021). This can be seen in relation to the reasons where hoarding purchases are mentioned as the main reason for shortages, and oil and basic foodstuffs can be stored well.

When it comes to the resilience of food systems, we can see considerable support among the population for a high level of regional food supply, with, compared to the Corona pandemic, a simultaneous increase in the proportion of those who do not see German agriculture as well positioned for times of crisis (Busch et al. 2021). In summary, it can be seen that food prices are currently the most important aspect for people when buying food, with sustainability aspects taking a back seat. It remains to be seen how this will develop in the long term.

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