Extended Abstract

Paper/Poster Title	What do citizens think about sustainability in the
	agri-food sector?

Abstract prepared for presentation at the 98th Annual Conference of The Agricultural Economics Society will be held at The University of Edinburgh, UK, 18th - 20th March 2024.

Abstract 200 w	ords max
----------------	----------

This paper tries to elicit general public opinions on sustainability in the agri-food sector under the framework of the TRADE4SD Horizon 2020 project. It is based on unique database developed through a survey of general population in three European countries – Germany, Hungary and the UK. The survey was conducted in 2023 and covered 1,000 responses per country. In order to obtain our results, we have decomposed sustainability into three pillars, namely economic, social and environmental, and then treated them as a latent variables model which can be represented as a standard Structural Equations Model (SEM). Looking at the overall sustainability measure, economic sustainability is considered to be more important that the other two components, with social sustainability being the least important. Moreover, females consistently attach higher importance to all environmental measures, while residents of urban and rural areas do not in generally show significant differences in assessing the importance of sustainability components. Age effects and home ownership, used as an indicator of wealth, are found to be country specific.

JEL Code 1 Q1/. Q2/		see: www.aeaweb.org/jel/guide/jel.php?class=Q)		
	Introduction		- 250 words	
	JEL Code	Q17, Q27 see: www.aeaweb.org/iel/quide/iel.php?class=Q)		
	Keywords	sustainability, public survey, components		

This paper tries to elicit general public opinions on sustainability in the agri-food sector under the TRADE4SD Horizon 2020 project aimed at analysing the relationships between agri-food trade and sustainability. Public opinions are based on a unique database developed through a survey of general population in three European countries – Germany, Hungary and the UK. The main reason to proceed with a general public survey was that in a democratic society an important indication of future policies is what citizens think of the issue at hand. The survey, conducted in 2023, was commissioned to an external company (Szinapszis Itd, Hungary), specialised in market research. They were asked to create a sample representative of the population in the respective country by gender, age and residence in the country. The survey aimed to aid understanding of the prevailing opinions about the importance of different pillars of sustainability and their components. The survey was not intended to address a specific target group, but to cover as representative as possible cross-section of the population as in the countries involved. The choice of countries for the survey was based on different demographics and GDP/capita which may influence the opinions.



Methodology 100 – 250 words

In line with the literature, we have decomposed sustainability into three pillars, namely economic, social and environmental. In other words, sustainability can be measured in terms of these three pillars. For simplification, in the quantitative analysis we treat each of the pillars as a separate distinct measure of sustainability. Both the overall sustainability measure, as well as the measures of the three pillars are not directly observable. Each of the pillars, however, can be measured using specific components relating to that particular pillar, which are elicited during the survey. Technically, this is a latent variables model (with sustainability and the three pillars being latent measures) which can be represented as a standard Structural Equations Model (SEM). The relative size of the effects can be estimated via maximum likelihood. The models are, however, only identified up to a proportionality factor. This means that some standardisation of the estimated effects is required. We have standardised the estimated effects so that the effect of the first contributor to each latent measure is set to 1. These fixed contributions are those of the first components in each of the sustainability pillars, as well as the first measure of the overall sustainability (i.e. the economic pillar). The remaining 'contributions' are estimated.

Results 100 – 250 words

Since the raw data includes an assessment of importance in which smaller values denote higher importance, lower loading into any of the latent dimensions denotes higher weight. Looking at the overall sustainability measure, social and environmental sustainability have higher loadings than economic sustainability with the social sustainability having the highest one in all countries except England where is it similar to environmental sustainability. This means that economic sustainability is considered to be more important that the other two components with social sustainability being the least important. And while within each country the per capita GDP growth is considered the most important component of economic sustainability, the ranking of the other components differs between countries. Moreover, females consistently attach higher importance to all environmental measures. Residents of urban and rural areas do not in general show significant differences in assessing the importance of sustainability components (with some exceptions). Age effects in sustainability appraisal are country specific. For example, they exists in England with regard to economic and social sustainability, and in Germany with regard to environmental sustainability. However, it would be difficult to draw definite conclusions from such a country spread. Home ownership similarly has country specific effects, although it does show significant difference in the overall sustainability appraisal.

Discussion and Conclusion

100 - 250 words

In the post-Covid and the war in Ukraine environment the major concerns are about the economic sustainability, where policy efforts should be focused (at least in a short to mid-term). Within the broad area of economic sustainability, citizens preferences are for reducing poverty and securing employment. These two are interrelated as productive employment generating incomes is a major factor to reduce poverty. Water quality and water waste have been put at the centre of environmental sustainability. These issues are closely related to good health and well-being. Although citizens



prefer economic sustainability they appear to be more consistent when thinking of environmental sustainability than of economic one where their preferences are widely spread over different components.

