

## **Transnational Comparison Research**

**Interreg**  
North Sea Region  
**REFRAME**

European Regional Development Fund



EUROPEAN UNION

Consumer Attitudes on the Intention to Purchase Local Food Products in  
Sweden, Belgium, Germany, Denmark, and the Netherlands

Research commissioned by REFRAME and carried out by:

Jesper Kwant

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## Executive Summary

The current food system creates situations whereby unstable economies, environmental damage, and health issues become the norm. Therefore, many organizations and businesses explore alternatives for more sustainable food systems, of which local food markets are a prominent option.

REFRAME is an Interreg North Sea Region project set up<sup>1</sup> to create better conditions for food-related SMEs, social enterprises and initiatives by sharing knowledge and best practises to maximize the potential of a short food supply chain. One aspect of creating better conditions for food-related entities is to motivate and encourage local food consumption. Therefore, the attitude towards local food and influence on the intention to purchase local food needs investigating. This transnational research looked into the attitude towards local food and the intention to purchase local food of consumers in Västra Götaland (Sweden), West-Flanders (Belgium), Wesermarsch District (Germany), Denmark, and the Northern Netherlands.

The research question is as follows: How do consumer attitudes towards local food products influence the intention to purchase local food products in Västra Götaland (Sweden), West-Flanders (Belgium), Wesermarsch District (Germany), Denmark, and the Northern Netherlands?

To study the main research question and the created hypotheses, a quantitative study was the most suited with the utilization of a comprehensive questionnaire. Through data collection, varying numbers of respondents per region were retrieved via online means. Through a first multiple regression analysis, the findings show that the factors ‘concern for the local economy’ and ‘perceived quality’ have the most significant effect on the attitude towards local food. Furthermore, a second multiple regression analysis revealed that ‘perceived behavioural control’ (the person’s perceived ease or difficulty of carrying out a behaviour) causes the largest change in the intention to purchase local food in nearly all regions. Also, as people’s attitude towards local food increases their intention to purchase local food increases, as is shown in almost all areas under study. This result conveys the importance of *predictor* variables on attitude, as these subsequently influence the intention to purchase local food.

For the majority of regions/countries in this study, the focus should be on highlighting the concern for the local economy, by showing how their local food purchases support local farmers and businesses. Furthermore, marketers should highlight the quality of local food (freshness, taste, and overall quality). Also important: the findings from West-Flanders and the literature mention that local food should be made more available, convenient to purchase, affordable, and information on its origin should be easily accessible. Future research should focus on the factors that promote and hinder the purchase of local food.

There are other aspects from the research that could be highlighted here. For example, the results from Wesermarsch District and the Northern Netherlands reveal that the consumer’s knowledge with regards to local food should be

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<sup>1</sup> <https://northsearegion.eu/reframe/>

increased (e.g. on seasonal products, advantages of local food, local food origin, and how to distinguish between local and non-local food) to have a positive effect on the intention to purchase local food. What's more, companies, marketers and policy makers in Västra Götaland and Wesermarsch District could put more effort in clearly labelling local food, showing how the customer is receiving good value for money, and why the purchasing of local food products at a premium price is worthwhile. In West-Flanders and the Northern Netherlands people are influenced by their friends and family when it comes to purchasing local food products. It is recommended to take this into account as well.

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# 1. Introduction

“Globalization of supply chains and the concentration and consolidation of food retailing, manufacturing, and production are key characteristics of contemporary food systems in developed countries” (Cranfield, Henson, & Blandon, 2012). This current food system contributes to creating unsustainable economies, environmental damage, and health issues to just name a few (Sustain, 2002). The European Union recognizes this issue and has developed the strategy “Farm to Fork” as part of the European Green Deal (Europa, 2020). This strategy aims to construct a fair and sustainable food system, promotes health, and is environmentally friendly. Such a sustainable-resilient food system is paramount and is made even more apparent with crises such as the Covid-19 pandemic. One concept that is getting much traction in Europe that synchronizes with the farm to fork strategy is the shortening of the food supply chain (Kumar & Smith, 2018).

Creating alternative food markets local food markets based on the shortening of the supply chain, whereby food is consumed and produced in the same region. Additionally, corroborated by the UK Policy Commission of Farming and Food, these kinds of markets can provide on all aspects of sustainable development, in specific the economic, environmental, and social sectors (Sustain, 2002). Aspects of sustainable development, such as health & food safety concerns and community development, create the demand/motivation to support locally/regionally produced food (Zepeda & Li, 2006, Zepeda & Deal, 2009).

At the same time, consumers are concerned about the role of businesses in the food system and the devastating implications, especially after numerous scandals. These are resulting in a higher demand for transparency into the food system and the origin of food (Feldmann & Hamm, 2015). Those circumstances call for establishing alternative food systems, emphasizing local food, as the current food system has no longevity (Cranfield, Henson, & Blandon, 2012). This increase in demand has already been seen and has set the path for research into the underlying behaviour, attitudes and purchase decision regarding locally/regionally produced food and consumption (Feldmann & Hamm, 2015).

This research was commissioned by REFRAME, an Interreg North Sea Region project set up to create better conditions for food-related SMEs, social enterprises, and initiatives by sharing knowledge and best practises to maximize the potential of a short food supply chain. However, the establishment of short food supply chains only has merits if the consumer, the last link in the chain, chooses to consume the local food product. Therefore, to encourage and increase local food consumption, a study into the (potential) consumers is required to point out specific support measures to achieve this. This research investigates the consumers in Västra Götaland (Sweden), West-Flanders (Belgium), Wesermarsch District (Germany), Denmark, and the Northern Netherlands on their attitudes and purchase intentions towards local food. Transnational allows for similarities and differences to be compared and perhaps unlock local/regional opportunities. In this context, the consumer attitude is “the degree to

which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991). Fundamentally, this research provides insight into the development of consumer attitudes towards local/regional food and the decision-making of whether or not to purchase/consume local food products.

As follows: Firstly, the relevant literature is identified and analysed. The literature review forms the basis of the constructed conceptual framework that houses the main research question. The methods for collecting the data will be set out to subsequently lead to the section of the report known as findings, analysis, discussion, and recommendation. Next, the similarities and differences between the regions will be discussed and a critical evaluation of the research provided. Lastly, the study will be concluded and the reference list and appendixes presented.

## **2. Literature Review**

### **2.1 Introduction Literature Review**

The literature review identifies and analyses the existing knowledge (definitions, theories, and points of view) on consumer attitudes and purchase decisions concerning local food. Before delving into the theory associated with consumer attitudes and purchase decisions, the definition of local food needs to be addressed.

### **2.2 What is Local Food?**

The definition of local food in the context of this research refers to the food produced and sold in the respective regions/countries. The definition has been further optimized and translated with the expertise of the REFRAME partners for the various regions under study. This results into the following definitions:

- The definition for Västra Götaland is as follows: “The term local food referred to in the survey is food produced and sold in Västra Götaland”.
- The definition for West-Flanders is as follows: “The term “local food” in the context of this questionnaire refers to the food produced and sold in West Flanders”.
- The definition for the Wesermarsch District is as follows: “The term "local" in the context of this questionnaire refers to the food produced and sold in the Wesermarsch”.
- The definition for Denmark is as follows: “The term "local food" in this questionnaire refers to Danish food purchased within a radius of 50 km”.
- The definition for the Northern Netherlands is as follows: “The term “local food” in the context of this questionnaire refers to the food produced and sold in the Northern Netherlands, i.e. the provinces of Groningen, Friesland and Drenthe ”.

For additional information on the reasoning and justification in the creation of the definition of local food as seen above please refer to Appendix 1.

### **2.3 Consumer Attitudes and Predictor Variables**

Consumer attitudes is “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991). This research looks into the relation between consumer attitudes and intention to perform a behaviour. This relation has been investigated before, showing that the intention can be accurately predicted by the consumer attitude towards set behaviour (Ajzen, 1991).

Besides consumer attitudes it is equally important to study what actually forms these local food attitudes, and thus subsequently influence the intention to purchase local food products. The literature reveals several prevailing

predictors, including health consciousness, concern for the environment, concern for the local economy, perceived quality, and food safety.

- Health consciousness: People are health conscious when they are “aware and concerned about their state of well-being and are motivated to improve and/or maintain their health and quality of life, as well as preventing ill health by engaging in healthy behaviours and being self-conscious regarding health” (Michaelidou & Hassan, 2008).
- Concern for the environment: In essence the concern for the environment variable encompasses the recognition of the negative effects of the current food system on the environment (Pollution and deforestation). Simultaneously, the consumer associates local food with more environmentally-friendly production processes that emit a lower carbon footprint and reduction of the distance (food kilometres) the food needs to travel (European Parliament, 2016, Cranfield, Henson, & Blandon, 2012, Feldmann & Hamm, 2015, Zepeda & Deal, 2009).
- Concern for the local economy: This variable is the concern people experience for the local economy and how local food can counter this. As the concept of local food is shaped by food being produced, handled, and sold in an area where physical and economic activities take place and provide economic benefits to the region (Sustain, 2002). Moreover, research has shown that consumers link purchasing local food products with directly benefiting the local economy, such as farmers and communities (Zepeda & Leviten-Reid, 2004, Feldmann & Hamm, 2015).
- Perceived quality: Perceived quality can be defined and interpreted in two manners. First, the degree to which the item or service delivers on key customer requirements and how reliably these are provided (Yee & San, 2011). Secondly, the perceived quality is not referring to the product or such but more to the consumer’s judgement of the overall excellence or superiority of the entity or service (Yee & San, 2011). The perceived quality plays an essential role in the consumer decision making of purchasing a product.
- Food safety: The literature shows that many studies have revealed that consumers consider/view local foods to be safer to consume than non-local food products (Cranfield, Henson, & Blandon, 2012, Thilmany, Bond, & Bond, 2008, Feldmann & Hamm, 2015).

For all the above mentioned variables including consumer attitude, hypothesis have been constructed. These hypotheses can be seen at the end of this chapter. Furthermore, for reasoning and additional information on why these variables were chosen please refer to appendix 2.

## 2.4 Theory of Planned Behaviour

The previous section looked at the potential predictors of consumer attitudes from the literature in the context of local food. This section will elaborate on the theories that encompass attitude and intention. The first theory that shall be looked into is the Theory of Planned Behaviour.

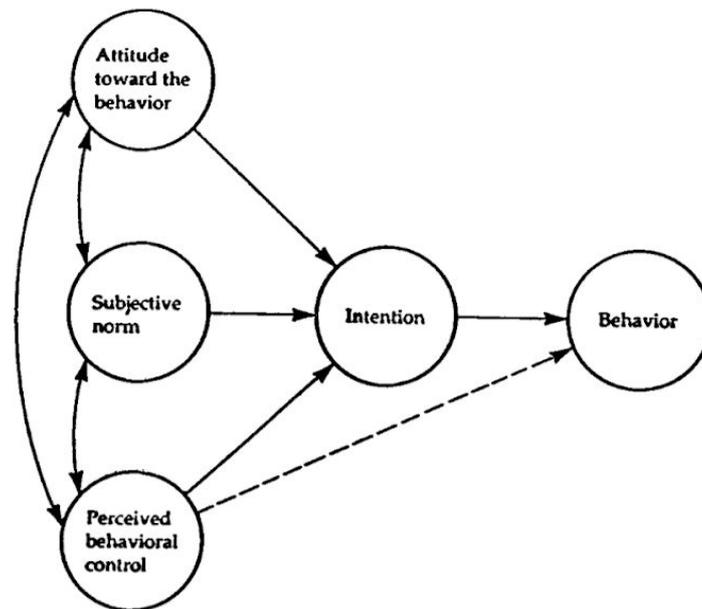


Figure 1: Theory of Planned Behaviour (Ajzen, 1991).

The Theory of Planned Behaviour (figure 1) is a theory that encapsulates the consumer attitudes, intention to purchase, and the behaviour of actually purchasing a product. The theory aims to come up with a framework for comprehending the determinants of such human behaviour in particular contexts, in this case, centred around purchasing of local food products (Ajzen, 2015, Ajzen, 1991). The various aspects of interest for this research with regards to the Theory of Planned Behaviour are explained below:

- Attitude toward the behaviour: “The degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991).
- Subjective norm: The subjective norm is a person’s perception of a particular behaviour affected by referent people. These are people in one’s immediate surroundings, such as parents and friends. These norms are founded in the person’s normative beliefs, that is the perceived social pressure from others to carry out such behaviour (Ajzen, 1991, Shin, Hancer, & Song, 2016).

- Perceived behavioural control: Perceived behavioural control is the person’s perceived ease or difficulty of carrying out a behaviour. The perceived control is dictated through control beliefs. These are the person’s perceived beliefs about the existence of opportunities or hindrances for supporting or hampering the behaviour (Ajzen, 1991, Shin, Hancer, & Song, 2016).
- Intention: The intention in the Theory of Planned Behaviour is the willingness of a person to carry out a particular behaviour, and is presumably the best predictor of behaviour (Shin, Hancer, & Song, 2016).

The application of the Theory of Planned Behaviour can be summarized as the following; the more advantageous the attitude and subjective norm concerning behaviour, and the higher perceived control is, the more likely that a person will develop an intention to execute the behaviour, in this case the purchasing of local food (Shin, Hancer, & Song, 2016). The various aspects mentioned are variables for this research and have been encapsulated into hypotheses that can be seen at the end of this chapter. For additional information on the Theory of Planned Behaviour and these variables please refer to Appendix 2.

## 2.5 The Alphabet Theory

The second theory that is explored for this research is The Alphabet Theory. The Alphabet Theory has been chosen as it has been used successfully to predict consumer food purchase behaviour by Zepeda et al. (2009), the creator of the theory, and has been specifically designed to understand local food purchase behaviour focusing on the aspect attitudes. The validity of the theory is further insured by Feldmann et al. (2015), as stated the theory “includes elements and interactions which have been found to be essential in describing local food consumption”.

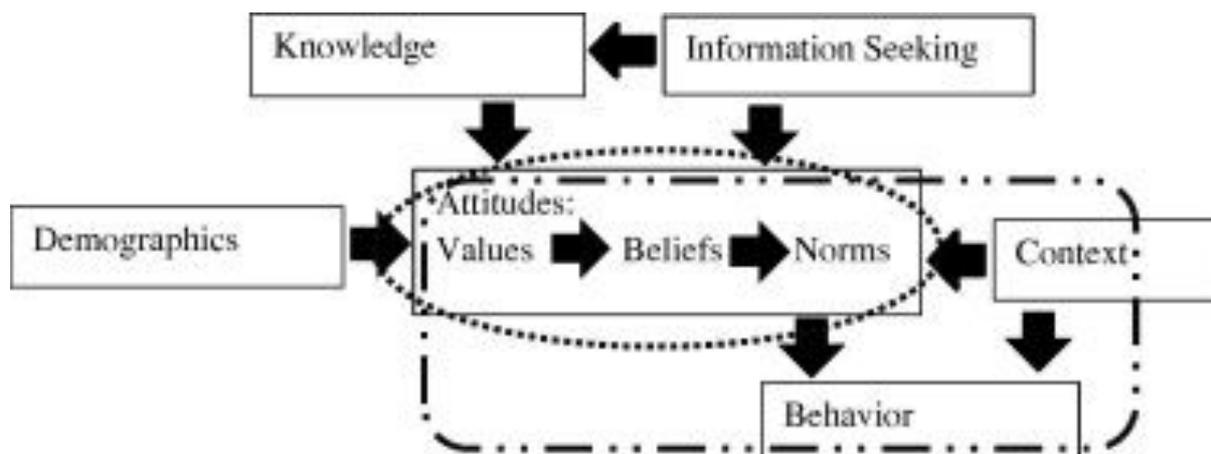


Figure 2: The Alphabet Theory (Feldmann & Hamm, 2015).

The Alphabet theory is a combination of the VBN and ABC Theory and is used to understand local food purchase behaviour (these building blocks are further investigated in Appendix 2). The Alphabet Theory includes besides those previously mentioned the elements demographics (D), knowledge (K), and information seeking (IS). These aspects are individually explored below:

- **Demographics:** The demographic variables to be employed in this research include gender, age, household size, location, employment status, and income.
- **Consumer's Knowledge:** Infers the comprehension of the subject, local food, in question. This would fortify the existing values of a person, which affect the beliefs and norms, resulting in an attitude towards local food purchase behaviour that is favourable or not.
- **Information Seeking:** How consumers collect information in this case on alternative food production methods. A consumer who investigates more into food production methods and general information around the behaviour will strengthen their knowledge and attitudes, which influences the subsequent purchase behaviour (Feldmann & Hamm, 2015).
- **Context:** is essentially the constraints or incentives to purchase local food. The contextual factors that come up most frequently are “availability, convenience, price, seasonal variety, and the influence of specific product types associated with local food” (Feldmann & Hamm, 2015).

For all the variables mentioned above, hypotheses have been constructed. These hypotheses can be seen at the end of this chapter. Furthermore, for the reasoning and additional information on why these variables were chosen please refer to appendix 2.

## **2.6 Consumption & Purchasing Local Food**

To give more context when studying local food it is also important to look into *what* food products are purchased and *where* or *how*. The food categories in this research are dairy, eggs, vegetables, fruit, bread, meat, poultry, and fish (Kumar & Smith, 2018, Garbacz, 2018). Places to purchase local food include local bakeries, butchers, and greengrocers; local market, the supermarket, internet, and box-schemes (Geurts, van Bakel, van Rossum, C. T. M., de Boer, & Ocké, 2016, Garbacz, 2018). These have been altered per REFRAME region, based on the conversation between the researcher and the REFRAME partner.

## 2.7 Conceptual Framework

The literature review has allowed for the following conceptual framework to be constructed (see figure 3). This framework will allow for insights into the consumer attitudes towards local food on the purchase intention of such food in Västra Götaland (Sweden), West-Flanders (Belgium), Wesermarsch District (Germany), Denmark, and the Northern Netherlands. The conceptual framework includes all hypotheses and has been constructed based on several variables, the Theory of Planned Behaviour, and Alphabet Theory.

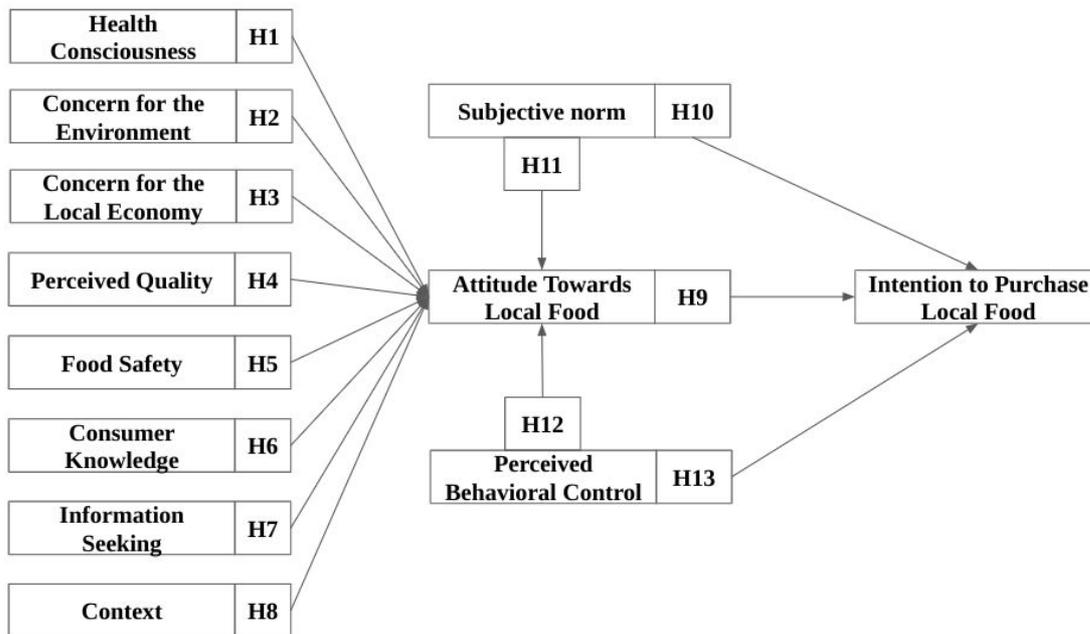


Figure 3: Conceptual framework (Kwant, 2020).

The framework comes forth from the literature, from which several hypotheses can be drawn:

- H1: There is a positive relationship between health consciousness and attitude towards local food.*
- H2: There is a positive relationship between concern for the environment and attitude towards local food.*
- H3: There is a positive relationship between concern for the local economy and attitude towards local food.*
- H4: There is a positive relationship between perceived quality and attitude towards local food.*
- H5: There is a positive relationship between food safety and attitude towards local food.*
- H6: There is a positive relationship between consumer's knowledge and attitude towards local food.*
- H7: There is a positive relationship between information seeking and attitude towards local food.*
- H8: There is a positive relationship between context and attitude towards local food.*
- H9: Positive attitudes toward local food will have a positive impact on the intention to purchase local food.*
- H10: There is a positive relationship between subjective norm and attitude towards local food.*

*H11: Subjective norm has a positive influence on the intention to purchase local food.*

*H12: There is a positive relationship between perceived behavioural control and attitude towards local food.*

*H13: Perceived behavioural control will have a positive influence on the intention to purchase local food.*

## **2.8 Conclusion Literature Review**

In conclusion, a conceptual framework has been constructed that incorporates all hypotheses. The overall goal of this research is to give insight into the consumer attitudes towards local food on the purchase intention in Västra Götaland (Sweden), West-Flanders (Belgium), Wesermarsch District (Germany), Denmark, and the Northern Netherlands. The research question formulated that encapsulates this framework is:

‘How do consumer attitudes towards local food products influence the intention to purchase local food products in Västra Götaland (Sweden), West-Flanders (Belgium), Wesermarsch District (Germany), Denmark, and the Northern Netherlands?’

In the next chapter an appropriate method of researching this question will be explored through the utilization of the literature (Kwant, 2020).

### **3. Methods**

The methodology for the collection and analysis of data to answer the main research question will be explained in this section. The nature of this research is to be quantitative as most research carried out on the topic of consumer attitude is of this manner (Feldmann & Hamm, 2015) and it applies to the testing of the constructed hypotheses. The outcomes of the hypothesis, supported or not supported, will provide insight into the consumer behaviour of inhabitants in the five REFRAME Regions. Particularly, the role of predictor variables on the attitudes towards local food and subsequent intention to purchase local food products (Kumar & Smith, 2018). Therefore, the research design adopted is known as the deductive research approach (Collis & Hussey, 2014). The construction of the tool for the data collection is based on the literature and previous research designs (Kwant, 2020).

#### **3.1 Collection of Data**

The research tool chosen to investigate the main research question and hypothesis is a questionnaire, which previously has been proven as a tool for this kind of research (Kumar & Smith, 2018). The questionnaire constructed can be seen in Appendix 4 and has been fabricated to incorporate all aspects of the conceptual framework (figure 3). The questionnaire consisted of statements to measure the (predictor and outcome) variables found in the literature (refer to Appendix 3 for the statements with corresponding reasonings and justification). For more information on the collection of data please refer to Appendix 5.

#### **3.2 Population & Sample**

The sampling method used is known as convenience sampling. Thus, as long as the person was an inhabitant of the regions mentioned below, willing, and available to participate, they were considered part of the sample (Kwant, 2020). Below a deeper dive into the population and sample for each REFRAME region. Please refer to Appendix 5 for more information on the collection of data.

##### **Västra Götaland (Sweden)**

The region in Sweden used for this study is Västra Götaland. This area represents the partner region in the REFRAME project. The population of this region was 1,725,881 inhabitants in 2019 (Citypopulation, 2021 -a). This region has four sub-regions, namely Sjuhärad, Skaraborg, Fyrbodal, and Göteborgsområdet med insjöriket. An additional question in the questionnaire is the identification of the respondents location (Appendix 4.2).



Figure 4: Map of Västra Götaland, Sweden. (Google, 2020 -a)

### West-Flanders (Belgium)

After discussing with the REFRAME partner in Belgium, West-Flanders was chosen as an area of study, see figure 5. The number of inhabitants in West-Flanders was 1,200,945 inhabitants in 2020 (Citypopulation, 2021 -b). The respondents were also asked to fill in their postal code and if they live in a city or in the countryside (Appendix 4.3) as additional questions to the questionnaire based on the feedback and pilot-testing in West-Flanders.

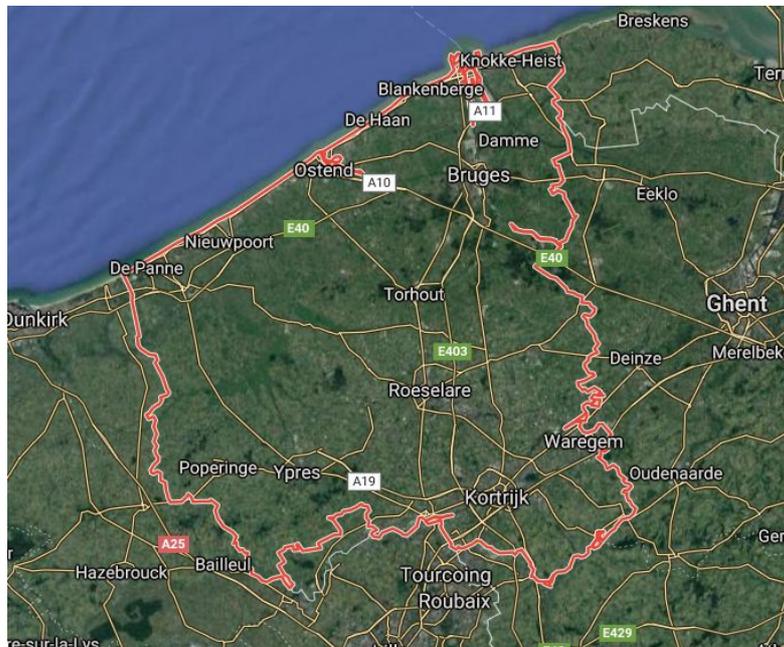


Figure 5: Map of West-Flanders, Belgium (Google, 2020 -b)

### Landkreis Wesermarsch (Germany)

The REFRAME partner region in Germany is the Landkreis Wesermarsch region (Figure 6). The number of inhabitants in this region was 88,583 in 2019 (Citypopulation, 2021 -c). As this area's size is relatively small compared to the others, a distinction between the cities and municipalities was made. The cities include Brake, Elsfleth, and Nordenham. The municipalities consist of Berne, Butjadingen, Jade, Lemwerder, Ovelgönne, and Stadland (Appendix 4.4)

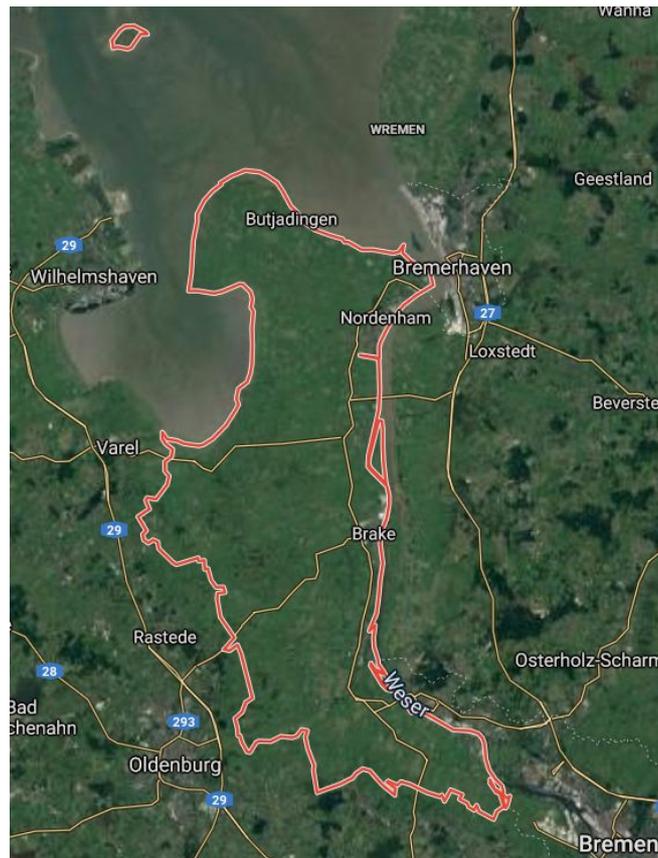


Figure 6: Map of Landkreis Wesermarsch, Germany. (Google, 2020 -c)

## Denmark

The partner in REFRAME for Denmark is Taste of Denmark<sup>2</sup>, which operates in the whole of Denmark. For this reason, the whole country has been chosen as a study area (See figure 7). Moreover, the population density in Denmark is very much skewed towards the Copenhagen Metropolitan Area. The population of Denmark was 5,822,763 inhabitants in 2020 (Citypopulation, 2021 -d). Denmark is split into the following regions; Hovedstaden, Sjælland, Syddanmark, Midtjylland, and Nordjylland (Appendix 4.5).



Figure 7: Map of Denmark. (Google, 2020 -d)

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<sup>2</sup> <http://smagenafdanmark.dk/>

## Northern Netherlands

For the last participating country, the Netherlands, the study covered the region of the Northern Netherlands (Figure 8). The population of this region in 2019 was 1,371,139 inhabitants (AlleCijfers, 2020, Eurostat, 2020). The Northern Netherlands was split into the following regions; Groningen, Drenthe, and Friesland (Appendix 4.6).



Figure 8: Map of Northern Netherlands (Red outline not possible, see reference for link). (Google, 2021)

### 3.3 Distribution of questionnaire

The questionnaire was distributed through online means only as offline was not feasible. This is because of the transnational nature of this research and thereby collect questionnaires in a similar method in all regions. The questionnaire was distributed through all the networks available to the REFRAME partners in the respective countries. One of these is through the Facebook platforms of the REFRAME-partners (Facebook pages included: Smagen Af Danmark, Landkreis Wesermarsch, Fedderwardsersiel, Krachtboer - La Force du Fermier, Inagro vzw, Naturbruksförvaltningen, and Respondenten Gezocht). The questionnaires were also distributed via the personal networks of the REFRAME partners. In the Northern Netherlands the questionnaire was also distributed via the personal contacts of the researcher and the April newsletter of 'Ketennetwerk Voedsel Stad en Ommeland' (network organisation in the Northern Netherlands and set up in the REFRAME project). The questionnaires were also distributed via several websites.

Respondents were also asked to share the questionnaire with other relevant organisations or people, creating a snowball effect. In addition, the online website SurveySwap was used, an online tool whereby students and researchers fill out each other's survey.

### **3.4 Analysis of Data**

To analyse the data from the questionnaire, the raw data was downloaded from Google Forms/Microsoft Forms in Excel form and then transformed into an PSpss/SPSS file (Microsoft Forms and SPSS was used for previous research in Northern Netherlands). First, the demographic information was analysed and summarised in a presentable manner for reporting. To analyse the conceptual framework and hypotheses several tests were conducted, including a reliability test of the variables, correlation matrix, test for normality, and multiple regression analysis. Furthermore, the reliability, validity, generalizability, and consideration of ethical issues was investigated (Kwant, 2020). For more details of the data analysis, please refer to Appendix 5.

## 4. Findings, Analysis, Discussion & Recommendations

The findings and analysis are based on the results of the conducted questionnaire shown in Appendix 4. The quantitative analysis is split up into demographic information, additional information on local food consumption, and the multiple regression analyses. At the end of the findings and analysis, the hypotheses outlined in the literature review and visually represented in the conceptual framework will either be supported, not supported, or excluded.

### 4.1 Demographic Information and Local Food Consumption

#### 4.1.1 Demographic Information of the Regions

<b>Västra Götaland (Sweden) - Questionnaire 159 Respondents</b>	
Male (37.11%) and Female (61.64%)	Full-time employed (54.72%)
Age category 45 - 54 (30.82%)	Highest education level university (55.97%)
Two people in household (39.62%)	Household monthly net income 5000 - 5999 euro (16.98%) and 6000 - 6999 euro (16.98%)
Skaraborg (64.78%)	

Table 1: Profile Respondents Västra Götaland. (Please refer to appendix 6.1 for more insights into the demographic information of Västra Götaland and Appendix 4.2 the questionnaire for the income in Swedish currency.)

<b>West-Flanders (Belgium) - Questionnaire 172 Respondents</b>	
Male (38.95%) and Female (58.72%)	Reside in city (59.88%) or countryside (40.12%)
Age category 35 - 44 (36.3%)	Full-time employed (65.12%)
Four people or more in household (48.26%)	Highest education achieved Professional Bachelor (36.05%) or master (43.02%)
Most occurring postcodes 8200 and 8970	Household monthly net income 4000 - 4999 euro (19.77%) and 3000 - 3999 euro (18.60%)

Table 2: Profile Respondents West-Flanders. (Please refer to appendix 6.2 for more insights into the demographic information of West-Flanders.)

<b>Wesermarsch District (Germany) - Questionnaire 87 Respondents</b>	
Male (22.99%) and Female (74.71%)	Full-time employed (58.62%)
Age category 25 - 34 (26.44%)	Highest education level vocational training (28.74%)
Two people or more in household (44.83%)	Household monthly net income 2500 - 2999 euro (20.69%)
Brake (27.59%)	

Table 3: Profile Respondents Wesermarsch District. (Please refer to appendix 6.3 for more insights into the demographic information of Wesermarsch District.)

<b>Denmark - Questionnaire 78 Respondents</b>	
Male (24.36%) and Female (75.64%)	Full-time employed (46.15%)
Age category 15 - 24 (29.49%) and 45 - 54 (29.49%)	Highest education level university (47.44%)
Two people or more in household (50%)	Monthly net income 4000 - 4999 euro (19.23%)
Midtjylland (37.18%)	

Table 4: Profile Respondents Denmark. (Please refer to appendix 6.4 for more insights into the demographic information of Denmark and Appendix 4.5 the questionnaire for the income in Danish currency.)

<b>Northern Netherlands - Questionnaire 152 Respondents</b>	
Male (42.1%) and Female (57.9%)	Students (unemployed) (55.3%)
Age category 15 - 24 (50%)	Highest education level university of applied sciences (50%)
Two people or more in household (33.6%)	Household monthly net income 2000 euro or less (57.9%)
Groningen (75.7%)	1/3 of respondents were internationals residing in the Northern Netherlands

Table 5: Profile Respondents Northern Netherlands. (Please refer to appendix 6.5 for more insights into the demographic information of the Northern Netherlands.)

### 4.1.2 Comparing the Demographic Information Among the Countries

The demographic information above presents several interesting insights. There are several similarities between the respondents. First, the ratio between male and female is pretty even when the number of respondents is taken into consideration. Another similarity is that most respondents are full-time employed and have two people in their household.

For all the regions except the Northern Netherlands, the most prominent occupation is full-time employment. In the Northern Netherlands, most of the respondents were students (unemployed). The main reason for this difference is that the researcher distributed the questionnaire among his network, which mainly consisted of students. This is due to convenience sampling and might not represent the entire population in the Northern Netherlands. This is also represented in the income category and age range.

## 4.2 Additional Information on Local Food Consumption

### 4.2.1 Additional Information on Local Food Consumption of the Regions

<b>Västra Götaland (Sweden) - 7-point scale of never (1) to always (7)</b>	
Frequency and place of purchasing local food: Supermarket (4.47), local greengrocer (4.09), and local butcher (4.06)	General frequency of purchasing local food - frequently (4 out of 7)
Local food categories most frequently bought: Eggs (5.40), meat (4.84), and dairy (4.49)	Effort to purchase local food - occasionally (3 out of 7)
Responsible for grocery shopping - almost always (6 out of 7)	

Table 6: Additional information local food consumption Västra Götaland. (Please refer to appendix 7.1 for more insights into the local food consumption of Västra Götaland.)

<b>West-Flanders (Belgium) - 7-point scale of never (1) to always (7)</b>	
Frequency and place of purchasing local food: Farm producer (3.99), supermarket (3.48), and regional producer (3.47)	General frequency of purchasing local food - frequently (4 out of 7)
Local food categories most frequently bought: Vegetables (4.73), bread (4.61), and fruit (4.32)	Effort to purchase local food - frequently (4 out of 7)

Responsible for grocery shopping - almost always (6 out of 7)	
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Table 7: Additional information local food consumption West-Flanders. (Please refer to appendix 7.2 for more insights into the local food consumption of West-Flanders.)

<b>Wesermarsch District (Germany) - 7-point scale of never (1) to always (7)</b>	
Frequency and place of purchasing local food: Local bakery (5.10), supermarket (4.82), and local greengrocer (3.72)	General frequency of purchasing local food - occasionally (3 out of 7)
Local food categories most frequently bought: Eggs (5.18), bread (4.98), and vegetables (4.60)	Effort to purchase local food - occasionally (3 out of 7)
Responsible for grocery shopping - Always (7 out of 7)	

Table 8: Additional information local food consumption Wesermarsch District. (Please refer to appendix 7.3 for more insights into the local food consumption of Wesermarsch District.)

<b>Denmark - 7-point scale of never (1) to always (7)</b>	
Frequency and place of purchasing local food: Supermarket (4.33), local bakery (3.62), and farm shops (3.15)	General frequency of purchasing local food - occasionally (3 out of 7)
Local food categories most frequently bought: Vegetables (3.95), eggs (3.92), and fruit (3.76)	Effort to purchase local food - occasionally (3 out of 7)
Responsible for grocery shopping - almost always (6 out of 7)	

Table 9: Additional information local food consumption Denmark. (Please refer to appendix 7.4 for more insights into the local food consumption of Denmark.)

<b>Northern Netherlands - 7-point scale of never (1) to always (7)</b>	
Frequency and place of purchasing local food: Supermarket (4.89), local market (3.90), and local bakery (3.60)	
Local food categories most frequently bought: Vegetables (3.95), fruit (3.92), and bread (3.76)	

Effort to purchase local food - occasionally (3 out of 7)
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Table 10: Additional information local food consumption Northern Netherlands. (Please refer to appendix 7.5 for more insights into the local food consumption in the Northern Netherlands.)

#### **4.2.2 Comparing Regions/Countries on the Collected Additional Information**

From the additional information collected, it can be seen that most respondents in all regions do their local food purchases at the supermarket. Furthermore, the most frequently locally purchased food category is vegetables and is in the top three food categories for all regions except Västra Götaland, Sweden. The other food categories in the top three of all regions except Västra Götaland are eggs, fruit, and bread. In Västra Götaland the food categories meat and dairy are in the top three of local food purchases. These do not appear in the other regions.

### **4.3 Multiple Regression Analysis**

Now that Cronbach's Alpha (Appendix 8), correlation matrix (Appendix 9), and test for normality (Appendix 10) has been determined for the various regions, the next step is the multiple regression analysis. For each of the REFRAME partner regions, one or two multiple regression analyses are discussed. The first regression analysis relates to health consciousness, concern for the environment, concern for the local economy, perceived quality, food safety, consumer's knowledge, information seeking, context, subjective norm, and perceived behavioural control on the attitude towards local food. The second regression analysis is the subjective norm, attitude towards local food, and perceived behavioural control on the intention to purchase local food. For Västra Götaland the regression on attitude was not possible, therefore an alternative was carried out. (see Appendix 11.1 for reasoning why this regression was not possible). Also, it should be noted that not all variables will be in all regression analysis, as explained in the subsequent sections.

The multiple regression analysis has been carried out and can be seen in section 4.4. From these the set out hypotheses have either been supported, not supported, or excluded. An overview of this per REFRAME region can be seen in Appendix 14. Moreover, the figures in the next section are a visual representation of the hypothesis and consequently, an updated conceptual framework for the five different REFRAME regions. If the variable and the H box in the figures contained in the next section are bold it means that they influence the variable at the end of the arrow. The percentage in the figure means how much of that variable can be explained by the bold variables at the opposite side of the arrow. Furthermore, the numbering by the arrow indicates which is most important and then in descending order (Please refer to Appendix 11.11 for the multiple regression models with additional information).

## 4.4 Västra Götaland, Sweden - Discussing the Multiple Regression Analysis

### 4.4.1 Multiple Regression Analysis (Intention)

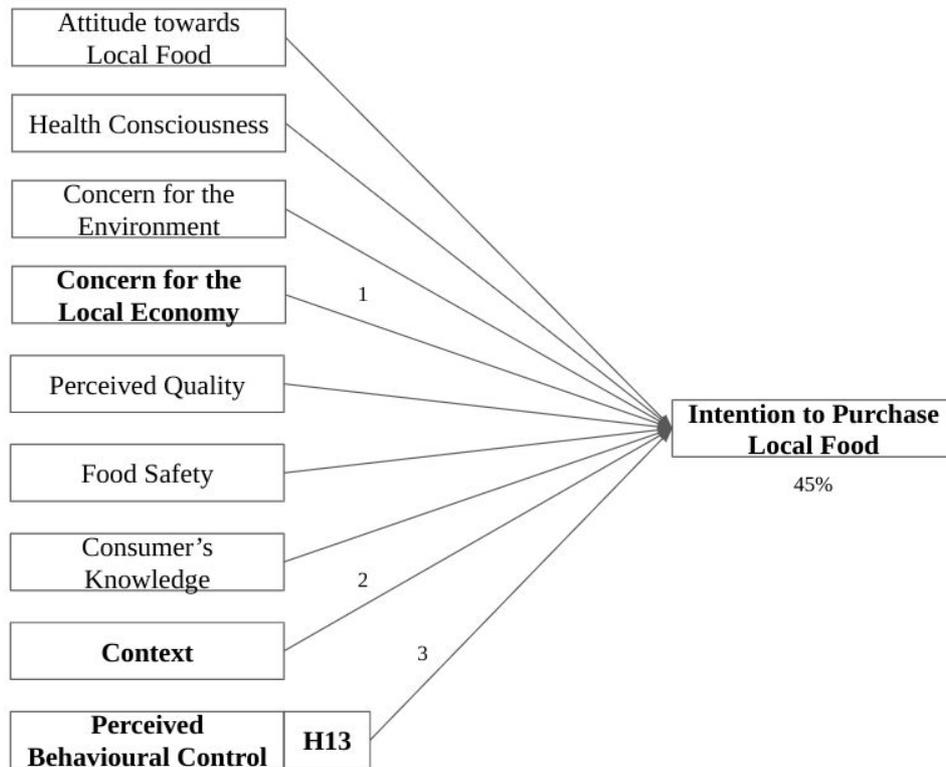


Figure 9: Updated conceptual framework Västra Götaland (Sweden) - Intention on all predictor variables.

### **Intention regressed on concern for the local economy, context, and perceived behavioural control**

The updated conceptual framework, figure 9, gives a good prediction as 45% of the intention to purchase local food can be explained by the concern for the local economy, context, and perceived behavioural control. The concern for the local economy causes the most change in the intention to purchase local food. So, the higher the concern for the local economy, the higher the intention to purchase local food. This is in line with the literature review that consumers have linked purchasing local food products with directly benefiting the local economy, such as farmers and communities (Zepeda & Leviten-Reid, 2004, Feldmann & Hamm, 2015).

Besides concern for the local economy, the context and perceived behavioural control were also significant and provided some interesting insights. First, the regression reveals the more favourable the context in terms of “availability, price, complexity, and inconvenience” (Feldmann & Hamm, 2015), the higher the intention to

purchase local food products. Secondly, the importance of perceived behavioural control is shown. So, the easier the people in Västra Götaland perceive local food purchasing, the higher the intention to purchase local food.

## 4.5 West-Flanders, Belgium - Discussing the Multiple Regression Analysis

### 4.5.1 Multiple Regression Analysis (Attitude and Intention)

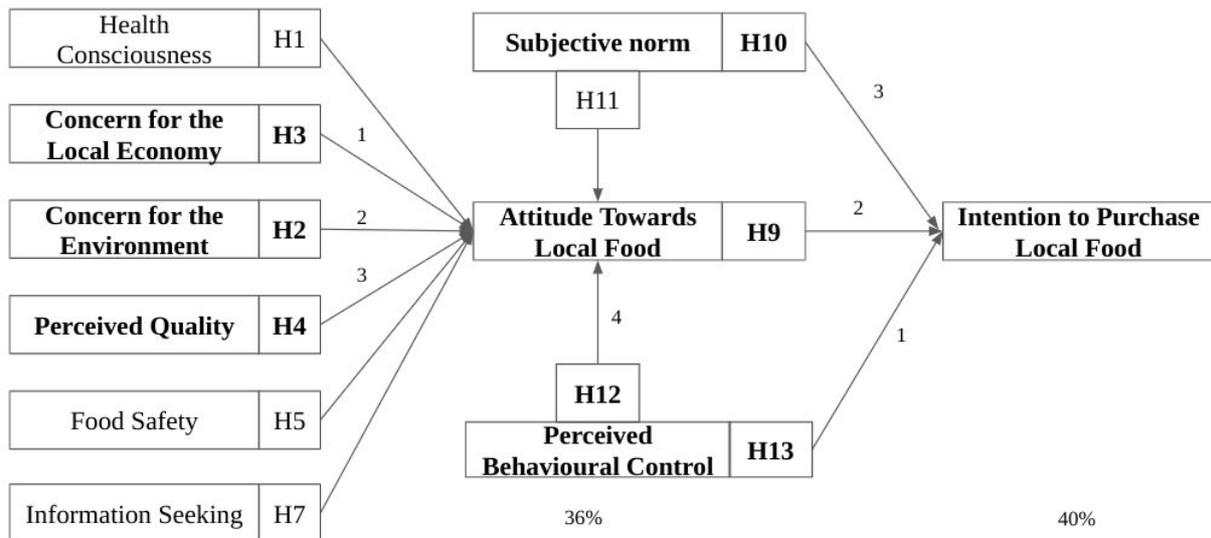


Figure 10: Updated conceptual framework West-Flanders (Belgium) - Attitude and intention regressed on predictor variables.

#### **Attitude regressed on concern for the local economy, concern for the environment, perceived quality, and perceived behavioural control**

The updated conceptual framework, figure 10, gives a good prediction as 36% of the attitude towards local food is caused by the concern for the local economy, concern for the environment, perceived quality, and perceived behavioural control. Moreover, they can positively and significantly predict the attitude towards local food among the consumers in West-Flanders, Belgium.

The predictor variable concern for the local economy causes the most change in the attitude towards local food. Therefore, the consumer links purchasing local food to supporting local farmers and companies. From the literature review, it was discovered that supporting farmers is one of the main reasons for consumers to purchase local food (Cranfield, Henson, & Blandon, 2012). This research into West-Flanders further confirms it to be one of the main reasons and that the well-established predictor variable has a positive and significant effect on the attitude towards local food (Zepeda & Leviten-Reid, 2004, Feldmann & Hamm, 2015).

After the concern for the local economy the variable concern for the environment also positively and significantly predicts attitude towards local food. Going back to the literature, according to Zepeda et al. (2009) two things motivate local food shoppers which are environmental and community concerns. This is also seen in the outcomes of West-Flanders. The respondents strongly feel that the current approach to the environment is destroying it and that actions need to be taken to combat this.

The perceived quality also positively and significantly predicts the attitude towards local food; this further closes the literature gap identified by Kumar et al. (2018). As the perceived quality of local food in West-Flanders increases, the attitude towards local food increases.

### **Intention regressed on subjective norm, attitude towards local food, and perceived behavioural control**

The second multiple regression analysis looks at the intention to purchase local food products regressed on the attitude towards local food, perceived behavioural control, and subjective norm. The updated conceptual framework, figure 10, shows that all predictor variables can strongly and significantly influence the intention to purchase local food. The model gives a good prediction as 40% of the intention to purchase local food is explained by subjective norm, attitude towards local food, and perceived behavioural control.

This research mainly explored the attitude towards local food, although the variable causing the most change in the intention to purchase local food is the perceived behavioural control. Therefore, the increase in the perceived ease of purchasing local food products, the higher the intention to purchase local food products. The attitude towards local food followed behind with a positive and significant influence on the intention to purchase local food. This finding is in line with previous research, whereby the relation between attitude and intention is strong and well established (Kumar & Smith, 2018). Lastly, the subjective norm was also positively and significantly regressed on the intention to purchase local food. Therefore, the utilization of social influence to increase the intention to purchase local food products is of interest and something which will be further touched upon in the conclusions chapter (Kumar & Smith, 2018).

The perceived behavioural control came forth as the most significant change maker in the intention to purchase local food. Previous research has shown that perceived behavioural control has a significant effect on the intention to purchase local food products (Ajzen, 2015). This research further confirms this, and for that reason, it is recommended to carry out further research into the role of perceived behavioural control in West-Flanders.

## 4.6 Wesermarsch District, Germany - Discussing the Multiple Regression Analysis

### 4.6.1 Multiple Regression Analysis (Attitude and Intention)

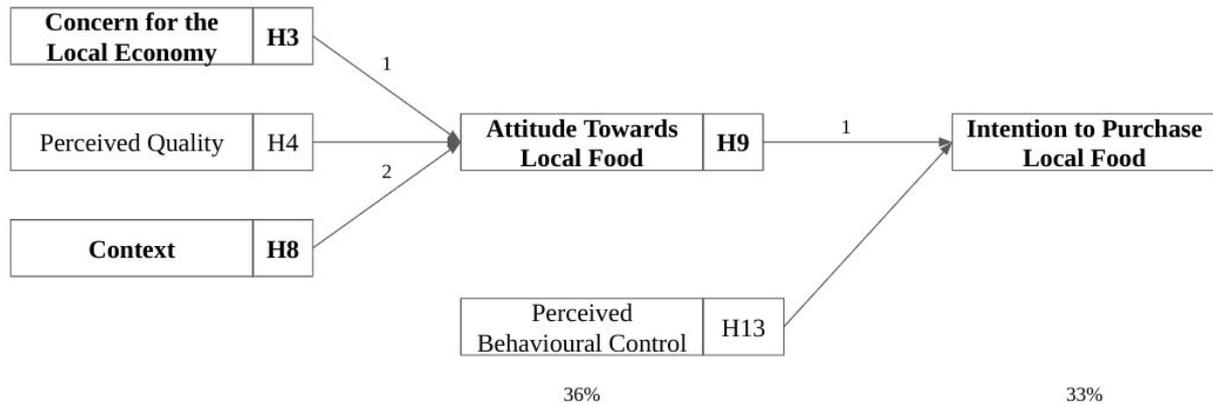


Figure 11: Updated conceptual framework Wesermarsch District (Germany) - Intention and attitude regressed on predictor variables. (It should be noted that the outcomes for the Wesermarsch District are only indicative because of the number of respondents acquired, which has implications on the representativeness and generalizability (See Appendix 5.6.3 for additional justification))

#### **Attitude regressed on concern for the local economy and perceived behavioural control**

The quantitative analysis first investigated the attitude towards local food being regressed upon the predictor variables. As you can see from the conceptual framework, figure 11 shows three predictor variables included in the updated conceptual framework forthcoming from the multiple regression analysis.

The updated conceptual framework gives a good prediction as 36% of the attitude towards local food is explained by the concern for the local economy and perceived behavioural control. With that being said the updated conceptual framework showed that the concern for the local economy and context can positively and significantly predict the attitude towards local food among the consumers in Wesermarsch District, Germany.

The concern for the local economy causes the most change in the attitude towards local food. Therefore, the consumer links purchasing local food to supporting local farmers and companies. From the literature review, it was discovered that supporting farmers is one of the main reasons consumers purchase local food (Cranfield, Henson, & Blandon, 2012). This research into Wesermarsch District further confirms it to be one of the main reasons and that the concern for the local economy has a positive and significant effect on the attitude towards local food (Zepeda & Leviten-Reid, 2004, Feldmann & Hamm, 2015).

The variable context also positively and significantly predicts attitude towards local food. Therefore, creating a favourable context around the purchasing of local food products means a higher attitude towards these products, and subsequently the intention to purchase the local food products.

### Intention regressed on attitude towards local food and perceived behavioural control

The second multiple regression analysis looked at the intention to purchase local food products regressed on the predictor variables attitude towards local food and perceived behavioural control. The updated conceptual frameworks, figure 11, shows that the predictor variable attitude towards local food can strongly and significantly influence the intention to purchase local food. The model gives a good prediction as 33% of the intention to purchase local food products is explained by the attitude towards local food and perceived behavioural control.

This research investigates the relationship between attitude towards local food and the intention to purchase set local food. This relationship has been found in the Wesermarsch District. Already firmly confirmed by previous research in this relationship (Kumar & Smith, 2018) Moreover, the increasing consumer attitudes towards local foods is highly encouraged as it increases the intention. This could be achieved by focusing on the predictor variables discovered in the regression on the attitude towards local food, such as on the variable concern for the local economy. The variable subjective norm was not included; as previously mentioned, this construct was not internally reliable. It is recommended for future research to add additional statements to the measurement of subjective norm in the Wesermarsch District, Germany.

## 4.7 Denmark - Discussing the Multiple Regression Analysis

### 4.7.1 Multiple Regression Analysis (Attitude and Intention)

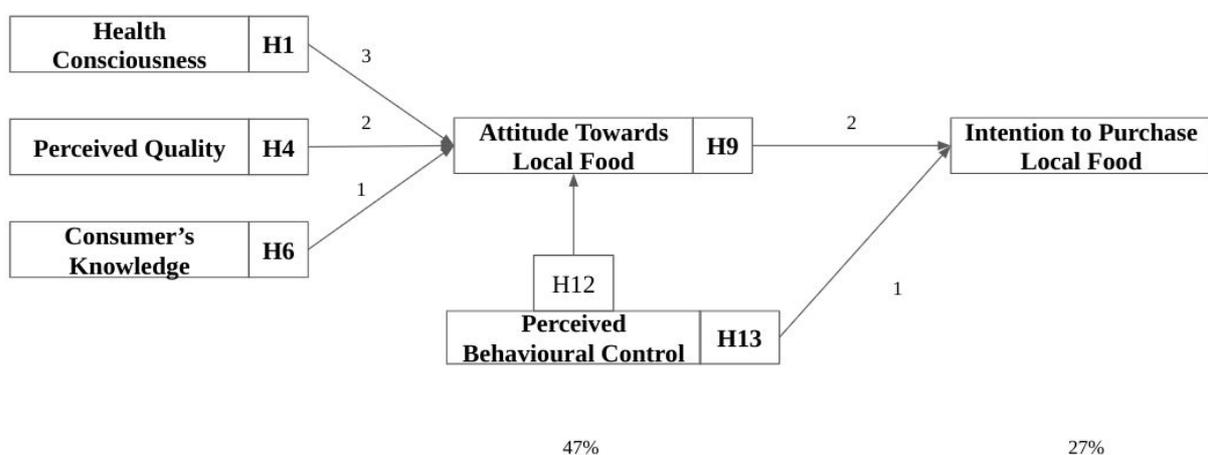


Figure 12: Updated conceptual framework Denmark - Intention and attitude regressed on predictor variables. (It should be noted that the outcomes for the Denmark are only indicative because of the number of respondents

acquired, which has implications on the representativeness and generalizability (See Appendix 5.6.3 for additional justification))

### **Attitude regressed on consumer's knowledge, perceived quality, and health consciousness**

The conceptual framework for Denmark, figure 12, gives a good prediction as 47% of the attitude towards local food is explained by the consumer's knowledge, perceived quality, and health consciousness. With that being said, the updated conceptual framework showed that the predictor variables consumer's knowledge, perceived quality, health consciousness can positively and significantly predict the attitude towards local food among the consumers in Denmark.

The predictor variable consumer's knowledge causes the most change in the attitude towards local food. Therefore, as the consumer's knowledge increases with regards to local food, the attitude towards local food increases. For instance, as the consumer becomes more aware of local food's advantages, the attitude towards local food increases and subsequently also the intention to purchase local food products.

In addition, the perceived quality positively and significantly predicts the attitude towards local food and this further closes the literature gap identified by Kumar et al. (2018). As the perceived quality increases (For instance, freshness and taste) the attitude towards local food increases.

Finally, health consciousness also positively and significantly predicts attitude towards local food with a regression. As health consciousness increases the attitude towards local food increases. From the literature, it can be seen that health is one, if not the most mentioned factor. Previously conducted research shows that consumers tend to link local food products with healthy eating, thereby being health-conscious (European Parliament, 2016).

### **Intention regressed on attitude towards local food and perceived behavioural control**

The second multiple regression analysis looked at the intention to purchase local food products regressed on the predictor variables attitude towards local food and perceived behavioural control. The updated conceptual framework, figure 12, shows that the predictor variable attitude towards local food and perceived behavioural control can strongly and significantly influence the intention to purchase local food. The model gives a good prediction as 27% of the intention to purchase local food products is explained by the attitude towards local food and perceived behavioural control.

This research mainly explored the attitude towards local food, although the variable causing the most change in the intention to purchase local food is the perceived behavioural control. Therefore, the increase in the perceived ease of purchasing local food products, the higher the intention to purchase local food products. The perceived behavioural

control came forth as the biggest change maker in the intention to purchase local food. Previous research has shown that perceived behavioural control has a significant effect on the intention to purchase local food products (Ajzen, 2015). This research confirms this, and for that reason, it is recommended to research the role of perceived behavioural control in Denmark.

The attitude towards local food followed behind with a positive and significant influence on the intention to purchase local food. This finding is in line with previous research, whereby the relation between attitude and intention is strong and well established (Kumar & Smith, 2018).

## 4.8 Northern Netherlands - Discussing the Multiple Regression Analysis

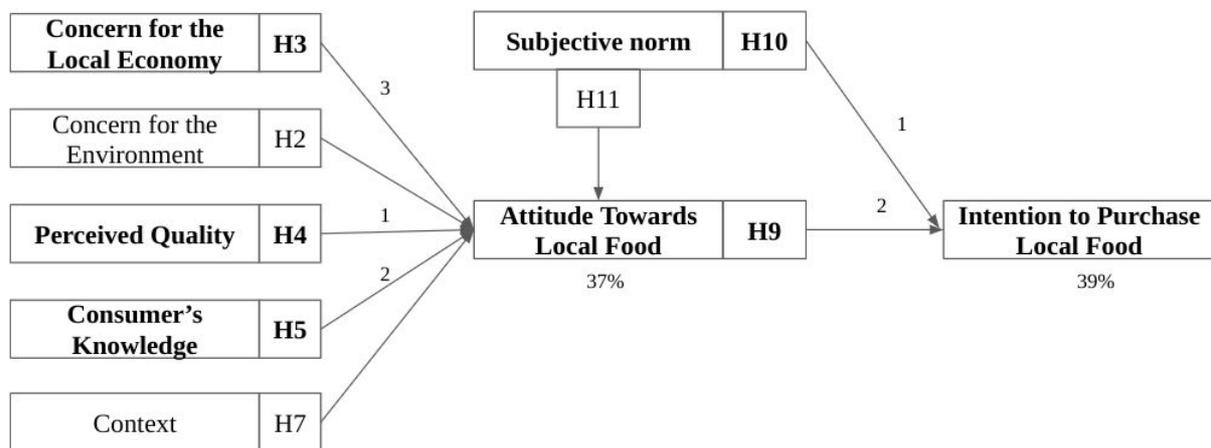


Figure 13: Updated conceptual framework Northern Netherlands - Intention and attitude regressed on predictor variables.

### 4.8.1 Multiple Regression Analysis (Attitude and Intention)

#### Attitude regressed on perceived quality, consumer's knowledge, and concern for the local economy

The quantitative analysis first looks at the attitude towards local food being regressed upon the predictor variables, figure 13. This shows that the perceived quality, consumer's knowledge, and concern for the local economy can positively and significantly predict the attitude towards local food among the consumers (mainly students in this research) in the Northern Netherlands. The updated conceptual framework gives a good prediction as 37% of the attitude towards local food is explained by perceived quality, consumer's knowledge, and concern for the local economy.

It can be seen that the predictor variable perceived quality causes the most change in the variable attitude towards local food. The variable perceived quality was a gap in the literature identified by Kumar et al. (2018) and is closed

through these findings. Similarly, the consumer's knowledge obtained from the Alphabet Theory was a gap in the literature in regards to the context of the Northern Netherlands. The concern for the local economy was well established from previous research to have a positive and significant effect on the attitude towards local food. These findings further confirm that effect in the context of the Northern Netherlands. Moreover, the results have implications for marketers chasing the highest consumption of local food as they could utilize these findings to positively increase the attitude towards local food products and thereby the intention to purchase the local food products.

### **Intention regressed on subjective norm and attitude towards local food**

The second multiple regression analysis looks at the intention to purchase local food regressed on attitude towards local food and subjective norm. The updated conceptual framework, figure 13, shows that both predictor variables can strongly and significantly predict the intention to purchase local food. The model gives a good prediction as 39% of the intention to purchase for local food is explained by subjective norm and attitude towards local food.

Even though this research explored the relationship between the attitude towards local food and intention to purchase local food, the predictor variable causing the most change in intention to purchase local food is the subjective norm. The subjective norm has in previous research also shown its importance and states that marketers should utilize social influences to increase the purchasing of local food products (Kumar & Smith, 2018). The attitude towards local food follows closely behind subjective norm and is also of significant influence on the intention to purchase local food products. This is in line with previous research, whereby the relation between attitude and intention is strong and well established (Kumar & Smith, 2018).

## **5. Discussing Similarities and Difference & Critical Evaluation of Study**

### **5.1 Similarities and Difference - First Multiple Regression Analysis**

The first multiple regression analysis for all regions/countries show several similarities and differences that should be highlighted. First of all, the most prominent predictor variable is the concern for the local economy. This is in both West-Flanders and the Wesermarsch District the variable causing the most change in the attitude towards local food. The alternative regression for Västra Götaland showed that concern for the local economy had the biggest effect on the intention to purchase local food. This further illustrates the importance of the variable concern for the local economy among the different regions. The concern for the local economy is also positive and significant in the Northern Netherlands. Furthermore, the predictor variable perceived quality is also important and follows closely behind the variable concern for the local economy being positive and significant in three regions/countries. Another notable similarity is that the predictor variable consumer's knowledge for both Denmark and the Northern Netherlands. The variable context was also significant in both the Wesermarsch District and Västra Götaland (In Västra Götaland directly on the intention and in Wesermarsch District via the attitude towards local food). The differences are that several other predictor variables are of importance in the various regions and not found in the other regions. These include the variable concern for the environment and perceived behavioural control for West-Flanders on the attitude towards local food. For Denmark this is the variable health consciousness.

### **5.2 Similarities and Difference - Second Multiple Regression Analysis**

The second multiple regression analysis shows several similarities and differences that should be noted. The most prominent predictor variable for nearly all regions is the perceived behavioural control except for in the Wesermarsch District and Northern Netherlands (Perceived behavioural control was also prominent in Västra Götaland but not the most on the intention to purchase local food). Although the perceived behavioural control causes the most change in intention to purchase local food, the predictor variable attitude towards local food was in all regions/countries positive and significant on the intention to purchase local food except Västra Götaland. The predictor variable's subjective norm was not internally reliable for many regions/countries and could not be included in the multiple regression analysis. Nevertheless, the subjective norm was present in West-Flanders and the Northern Netherlands as causing change in the intention to purchase local food.

### **5.3 Critical Evaluation of Study**

Overall, the study, including all regions/countries, has several limitations that should be considered when discussing the results. Due to the nature of this research in several countries simultaneously, only online distribution was employed. The sampling technique used was convenience sampling and snowball sampling. The number of

respondents acquired in Västra Götaland, West-Flanders, Northern Netherlands was successful because the minimum of 151 respondents were retrieved. Nevertheless, this is still the minimum, and more would have been better for generalization purposes. Moreover, for both the Wesermarsch District and Denmark, less than 100 respondents were retrieved. This has implications on the representativeness of the conclusions and implications, including the generalization of these outcomes. Also the Covid-19 pandemic could have implications on the outcomes of this research. Therefore, the results taking all this into account should be interpreted as such. (For additional information on the generalization implications please refer to Appendix 5.6.3) Although the minimum amount of respondents was acquired for the Northern Netherlands most of the respondents were students. This has consequences on the representativeness and generalizability of the result to the whole of the Northern Netherlands and should be taken into consideration when interpreting these.

Furthermore, the REFRAME partners were asked to spread the questionnaire under their own network and seek out and utilize other online channels and means to get the most representative sample possible. This hinders the representativeness of the study, as participants were not fully randomly selected. The questionnaire was originally in English and had to be translated to the respective languages of the participating countries. As the statements utilized for measuring the constructs were derived from English sources and worded carefully, translation errors could have occurred, thereby losing the essence of the statement. The translation was done by people that are native in that language so that these errors could be minimized.

## **6. Conclusions**

In conclusion, this research aimed to investigate the consumer attitudes towards local food products and the influence on the intention to purchase local food products in the five REFRAME regions and compare the similarities and differences between them. First, the literature was consulted on how the consumer attitude towards local food products are formed and the relation with the intention to purchase local food products. The conceptual framework was formed through the Theory of Planned Behaviour and Alphabet Theory. A gap in the literature is the utilization of the Theory of Planned Behaviour on a regional level. This has been successfully investigated due to the research conducted in the Northern-Netherlands. This study takes it to the next level by utilizing the Theory of Planned Behaviour in several regions spanning several countries.

Furthermore, this research also closes the gap in the literature with regards to the predictor variable perceived quality. Food safety, although measured, was not found to have an overall significant role in the attitude towards local food or intention to purchase local food for that matter. The conceptual framework is a visual representation of the main research question and the 13 hypotheses created to study the various relationships between the independent (predictor) and dependent (outcome) variables in the five REFRAME regions. The main research question is answered below for the various regions.

### **6.1 Västra Götaland (Sweden)**

For Västra Götaland (Sweden) 159 usable questionnaire responses were retrieved via online means. The findings and analysis of this collected data showed that 1 out of the 13 hypotheses were supported. The reason being that the multiple regression analysis with regards to attitude towards local food was not possible. This because the variable attitude was not normally distributed, therefore the factors influencing attitude could not be identified. The multiple regression analysis carried out was an alternative to the first and second multiple regression analysis that could not be performed. All predictor variables were regressed on the intention to purchase local food. As can be seen from this regression, three predictor variables have a significant and positive effect on the intention to purchase local food. These three in descending order are the concern for the local economy, context, and perceived behavioural control. Even though the indirect influence of the predictor variables via the attitude variable could not be identified, their direct influence in the aforementioned variables was seen.

To encourage local food consumption in Västra Götaland (Sweden), this research's outcomes could be utilized. Marketers should utilize the fact that people are concerned for the local economy and that by purchasing local food products it could support the local farmers and businesses. For instance, by communicating to consumers how the money spent on local farm products makes its way back to the local economy. Secondly, creating a favourable context for purchasing local food. For example, by clearly labelling local food so that it is easily recognizable, showing how the customer is receiving good value for money, and why the purchasing of local food products at a

premium price is worth it. Lastly, marketers of local food should play on the fact that the intention to purchase local food increases as the perceived ease to purchase local food increases. So, people in Västra Götaland purchase more local food when they experience a higher degree of self-efficacy or controllability. Therefore, the barriers and facilitators of purchasing local food should be investigated and mapped out so that marketers can utilize these insights to promote local food consumption.

## **6.2 West-Flanders (Belgium)**

For West-Flanders in Belgium, 172 usable questionnaire responses were retrieved via online means. The findings and analysis of the collected data showed that 7 out of the 13 hypotheses were supported. The first regression analysis revealed four predictor variables that have a significant and positive effect on the attitude towards local food. These four in descending order are concern for the local economy, concern for the environment, perceived quality, and perceived behavioural control. As can be seen, perceived quality has proven to be a predictor variable on the attitude towards local food, thereby lessening the literature gap. The second multiple regression analysis showed the predictor variables perceived behavioural control, attitude towards local food, and subjective norm all positively and significantly influence the intention to purchase local food products in descending order.

To encourage and motivate local food consumption in West-Flanders the outcomes of this research offers some avenues. Marketers should play on the fact that people are concerned for the local economy and that by purchasing local food products it could support the local farmers and businesses. For example, by letting consumers know how the money spent on local farm products makes its way back to the local economy. Also, the consumers are concerned for the environment, marketers should utilize this fact by for instance visualizing what impact your purchase has on the environment, thereby becoming more aware of the consequences of their purchases. Furthermore, marketers should highlight the overall quality of local food, especially the freshness and taste. Marketers should in their marketing efforts to customers, include these insights into how consumers perceive local food products. Moreover, they should utilize the perceived behavioural control by seeing what barriers are faced by consumers and on the other side what are facilitators of local food purchase behaviour. The barriers faced include lack of availability and variety, inconvenience, high prices, and unclear or lacking information on origin of local food. The purchases of local food increases when consumers have a higher degree of self-efficacy and controllability. In addition, marketers should also highlight that besides the attitude aspects, the focus should be on subjective norms by creating social influence among people to consume local food products. These insights apply to any marketer wanting to change the food consumption behaviour in West-Flanders.

## **6.3 Wesermarsch District (Germany)**

For Wesermarsch District Germany, 87 usable questionnaire responses were retrieved via online means. The findings and analysis of this collected data showed that 3 out of the 13 hypotheses were supported. The findings

from the first multiple regression analysis show that concern for the local economy and context significantly and positively influence the attitude towards local food. The attitude towards local food was found to have a significant and positive effect on the intention to purchase local food from the second multiple regression analysis.

The results of this study could be used by marketers in Wesermarsch District to stimulate local food consumption. First of all, marketers should play on the fact that people are concerned for the local economy and that it could support the local farmers and businesses by buying local food products. Namely, by communicating to consumers how the money spent on local farmers products makes its way back to the local economy. Secondly, a favourable context should be created around the purchasing of local food (e.g. easily available, clearly labelled local food so that it is easily recognizable, showing how the customer is receiving good value for money, and why the purchasing of local food products at a premium price is worthwhile). This will increase the attitude towards local food and thereby in turn the intention to purchase local food products. The attitude towards local food could be changed in a positive way by focusing on the discovered variables and creating marketing messages that highlight the benefits of local food.

## **6.4 Denmark**

For Denmark, 78 usable questionnaire responses were retrieved via online means. The findings and analysis of the collected data showed that 5 out of the 13 hypotheses were supported. The findings from the first multiple regression analysis show that consumer's knowledge, perceived quality, and health consciousness significantly and positively influence the attitude towards local food. The perceived behavioural control and attitude towards local food were found to have a significant and positive effect on the intention to purchase local food (according to the second multiple regression analysis).

To encourage the consumption of local food in Denmark, the outcomes of this research could be used by marketers. First of all, marketers should try to increase the consumers' overall knowledge regarding local food (e.g. seasonal food products, advantages of local food, the origin of local food, and how to distinguish between local and non-local food products). Secondly, local food qualities should be emphasised, for instance the freshness and taste of local food products. Thirdly, marketers should emphasize the importance of being aware of one's health and how local food contributes to the state of your health. For instance, marketers could highlight the benefits of eating local food by providing the connection between freshness and nutritional value, environment, and health. All these predictor variables will increase a positive attitude towards local food, which will mean a higher intention to purchase local food. It should also be pointed out that besides that, the attitude aspect marketers should focus on the perceived behavioural control. Therefore, the barriers and facilitators of purchasing local food should be mapped out so that marketers can utilize these insights to promote local food consumption.

## **6.5 Northern Netherlands**

For the Northern Netherlands, 152 usable questionnaire responses were retrieved via online means. The findings and analysis of the collected data showed that 5 out of the 13 hypotheses were supported and which provide interesting insights into the Northern Netherlands consumer attitude on the intention to purchase local food. The findings show that perceived quality, consumer's knowledge, and concern for the local economy significantly and positively influences the attitude towards local food (First multiple regression analysis). The second multiple regression analysis showed that the attitude towards local food and subjective norm positively and significantly influences the intention to purchase local food products.

To encourage local food consumption in the Northern Netherlands marketers could utilize these predictor variables. For example, by highlighting to consumers the quality of local food (e.g. taste or freshness) and how purchasing a local food product provides benefits to the local economy (e.g. local farmers or businesses). Moreover, the overall consumer's knowledge on local food should be increased (e.g. on seasonal products, advantages of local food, local food origin, and how to distinguish between local and non-local food). This will result in an increase and a positive attitude towards local food which will mean a higher intention to purchase local food. In addition, marketers should be aware that besides the attitude aspects, the influence of family and friends (the subjective norm) is important for the intention to purchase local food among the students in the Northern Netherlands. Social media campaigns and peer to peer campaigns could be a way of increasing the intention to buy local products.

## 7. Feedback from REFRAME-PARTNERS

### 7.1 Västra Götaland (Sweden)

In the pursuit of continuous improvements, you need to consider that the consumer's attitude becomes a factor in their purchase behaviour, as shown in the survey, such as concerns about the environment and the economy, the health aspect, quality, and food safety.

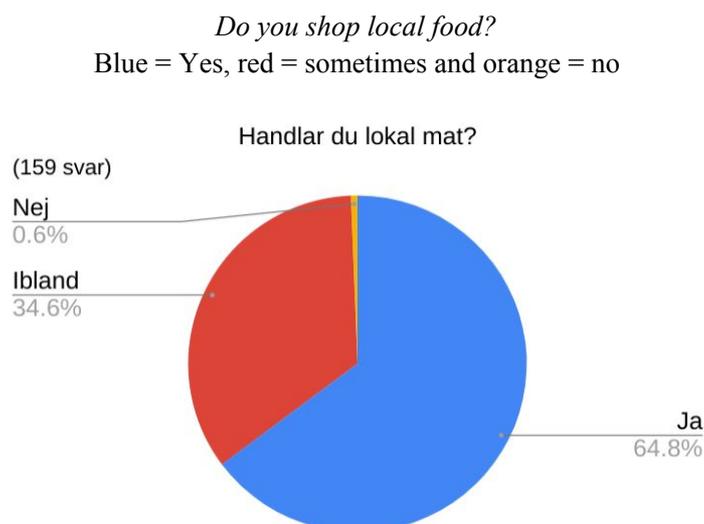


According to the report, the grocery store, farm shops or other places of purchase also need to make the products more visible to consumers, easier to find, and easier to buy. The consumer needs to be better informed about how the economy will be better for the local food producer if the consumer buys their products and benefits the Swedish-produced food in general. Almost all countries in the report had concerns about the economy. These are some of the issues that you can see in the report and that you must consider and work a lot with to increase the purchasing power of the consumer.

There are some farm shops in Sweden and more and more shops that only sell local Swedish-produced food from various farms and small-scale producers. It seems to have increased over the past year and the consumers are becoming more aware of being able to go to a store and buy more categories of Swedish locally produced food in one place. The same applies to the REKO rings. These stores and REKO rings probably fulfil the consumers perceived behavioural control in a better way than in a grocery store where a lot of other items are exposed at the same time.

The report reflects how consumers experience food produced in Sweden. But you also need to widen the purchases, not just eggs, meat, and dairy. The other countries also had bread, vegetables, and fruit, which we also need to consider including in our purchasing categories.

*One of the answers from the questionnaire. It's great, but you can always do better!*



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## **7.2 West-Flanders (Belgium)**

Some of the results of the transnational comparison research were predictable (perceived behavioural control) and other results were (concern of the local economy) new.

It prompted us to think about new ways to convince the citizens of West-Flanders to buy more locally. Future projects should play on the fact purchasing local food products supports local businesses. Consumers in West-Flanders are facing barriers such as time, distance to the local shop, and unclear origin on food labels. During the last phase of the REFRAME project EROV and INAGRO will eliminate this barrier by supporting local supermarkets with the marketing of the local products sold in their store. The importance of the local economy and environment should be taken into account. The project 'Farmer Business+' focusing on Perceptions and purchasing behaviour of food in a non-urban setting will compare the results between urban and non-urban consumers and take the results into account in the development of new project activities.

Process evaluation (recruiting of respondents, definition of local products, culture, 'corona' context) should be taken into account when interpreting data.

### 7.3 Wesermarsch District (Germany)

The survey conducted by the Dutch student Jesper Kwant on the purchasing behaviour of local food as part of the REFRAME project achieved interesting results that can be used for the German pilot region (Wesermarsch district). It should be noted,



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however, that due to a low number of participants (87 out of a targeted 150 people), representativeness is limited. Most of the participants were women (74.71%) and the main age group is between 25 and 34 years (26.44%). The German study area covers the entire district of Wesermarsch and the definition of local food refers to "products that are produced and sold in the Wesermarsch".

The survey showed, among other things, that the population in the Wesermarsch mainly buys eggs, bread and vegetables of regional quality. The places of purchase are mainly local bakeries, the supermarket and the regional greengrocer. It is interesting that the typical products produced in the Wesermarsch, meat and milk, were not primarily mentioned. Vegetables, on the other hand, which are only grown regionally to a small extent, were mentioned more frequently. This may indicate that consumers have a misconception about the place of production. On the other hand, it shows that there is a demand for regional vegetable products and that the supply should be increased. For farmers, this could be another mainstay in the business.

Furthermore, it was investigated how consumers' inner attitudes influence their purchasing behaviour with regard to regional food. The inner attitude is controlled by the following aspects in the Wesermarsch: Consumers mainly buy regional products in order to directly support the local economy and thus the local producers. The second main aspect is a positive context, i.e. that incentives and favourable framework conditions exist that restrict purchasing as little as possible. This includes availability, the degree of further processing (convenience products), price, and seasonal availability. A higher expected quality was mentioned as a third aspect by the participants. Subsequently, it was investigated which factors influence purchasing behaviour. As a result, it was found that the inner attitude (with the identified factors: support of local producers, the positive context) primarily and secondarily a perceived social control influence the buying behaviour.

Producers and marketers can use the results to increase their regional sales in a targeted way. It is recommended to show customers through marketing measures how they directly support regional producers and thus the economy by buying local products. The second recommendation is to create a pleasant environment or positive context related to the provision of local products for purchase. This includes, for example, clear labelling of the products (regional label) or regional shelves, so that consumers can easily recognise the products in the supermarket and make it clear why a higher price is justified.

## 7.4 Denmark

Congratulations with finishing your report! It is well written and even - to some degree - digestible for a person not skilled in this field of research. Lack of my competence does make it a bit difficult for me to discuss your report.

I have commented on your approach of data collection in Denmark previously and discussed their limitations. I would like to add just a bit to our discussion. My contribution to marketing R&D was never to understand consumers but to change consumer perceptions. And consumer perceptions have undergone a significant change in Denmark over the past 2 decades as a result of innovative food producers marketing their products. The producers based their marketing on the qualities imbedded in their products - on values including dietary and/or sensoric qualities, ethical qualities and/or parameters of environmental sustainability. In fact, the term 'local' was not a marketing parameter of innovative producers. You could find a discussion of significance of the term "local" in a previous REFRAME report ([Structural aspects of food production in Denmark, Interreg VB North Sea Region Programme](#)). A driver in changing market perception on the other hand was 'origin of production' . This would imply 'terroir' qualities of adaptive food production based on differences in natural conditions, differences in regional traditions of production or merely ingenious individuals on the various locations of production. In addition, it appealed to an appreciation of 'authenticity'. You can find this marketing development described as well in a REFRAME report: [Iconic food production – branding of local communities, Interreg VB North Sea Region Programme](#) including a reference to our development of a facultative designation of origin, 'Island Specialties'.

In 2011, I took part in a conference in Denmark arranged by the Ministry of Food etc. on the introduction of 'facultative labelling of origin of production' according to an EU initiative. The question was, if such branding based on origin of production should be supported in the branding of food in retail business in Denmark. Among such ' facultative designations of origin ' the EU stimulated a discussion of 'mountains' ' islands' and 'local'. All major players in the field of retail business in Denmark univocally was against this initiative - 'it would only make the products more expensive for our - precious - customers' was the statement - the word 'precious' an addition of mine to the quotation to illustrate the irony. I was the only person at that conference suggesting that labelling the origin of production potentially could become a significant driver in diversification of food production in Denmark. In 2014, all major players had changed their mind and adopted the dramatic change in consumer perception that had taken place. These players now introduced the term 'local' in their marketing. Asked what 'local, means, their answer was 'produced in Denmark'. What the major players did was to introduce an arbitrary term in order to embrace all the parameters upon which the innovative food SME's, developing terroir qualities, were marketing their products. This embracement by an arbitrary marketing term of substantial marketing parameters is what you confirm with your study - I think! However, the big players in retail business adapted to a trend in the market. They did not develop it, they actually caused a distraction from substantial matters but to be fair, they also increased the market demand significantly. However, the risk of distraction from substantial matters is that the increase in market demand is only

a temporary effect and I fear we start to see this in Denmark. Our response - as innovative food SME's - is not to build on the arbitrary marketing parameter, 'local' but to amplify a principle of 'evidence based' marketing. You may find a description of that in the REFRAME report <https://northsearegion.eu/reframe/online-resource-centre/regional-organization-in-a-cooperative-structure/foodmatrix-the-concepts-of-a-vision/>. I fully accept your conclusion as based on the state of consumer perception in Denmark - understanding also that this is what marketing research can do. However, based on my understanding of what caused the dramatic change in consumer perception and - even more so - in terms of sustaining this development in order to stimulate innovation in the food landscape I can not agree on your recommendations.

I hope you'll understand that this critique/reflection does not relate to the quality of your research, but only reflects that introduction of the term 'local' has caused allergic reactions among drivers of food innovation in SME's in Denmark.

## **7.5 Northern Netherlands**

### **Quality of local food**

The research shows that to increase consumption of local food, in the northern Netherlands we need to spread more knowledge on the quality of local food. More attention to the freshness of the food, due to short transport etc. And more attention to nutrition values of fresh food. We should stimulate research on the better nutrition value of organic food as well.

### **Consumers knowledge of local food**

By stimulating more publicity and research on local food and more attention on where to buy, make it easier by having more opportunities to buy, more people will be convinced and will actually buy more local food.

### **Concern for the local economy**

Recently more figures are published about the increase of food from the short food chain and which benefits the short food chain can deliver for local producers. We could publish these numbers on our Reframe website and our local website.

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