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## From Ocean to Plate

A critical analysis of perceived value addition through sustainable practices in the seafood industry

Graduate thesis in Marketing, Innovation and Management

Supervisor: Njål Sivertstøl

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## Sammendrag

Denne studien undersøker hvordan bærekraftig produksjon av sjømat kan øke produktverdien for forbrukere. Med økende etterspørsel etter sjømat og bekymringer knyttet til industriens miljøpåvirkninger, er det viktig å forstå forbrukernes oppfatning av bærekraftig sjømat.

Hovedmålet er å utforske hvordan bærekraftige produksjonsmetoder påvirker forbrukeres oppfattede verdi av sjømatprodukter. Dette inkluderer å vurdere effektiviteten av tiltak som øko-merking og sertifiseringer.

Studien benytter seg av dybdeintervjuer for å samle kvalitative data om forbrukerens oppfatning, kunnskap og preferanser knyttet til bærekraftig sjømat. Intervjuene ble analysert ved hjelp av teoretiske rammeverk som forventning-verdi-modellen og Woodruffs «Customer Value Hierarchy».

Funnene viser at forbrukerne har en generell forståelse av begrepet «bærekraftig sjømatproduksjon», men kunnskapsnivået varierer. De fleste oppfatter bærekraftig sjømat som ferskere, mer etisk og næringsrikt enn ikke-bærekraftige alternativ. Alle respondentene mente at bærekraftige produksjonsmetoder økte den oppfattede verdien av produktene. Pris var en viktig faktor, men kvalitet, smak, helsemessige fordeler og bærekraft var også viktige hensyn.

For å innhente informasjon om produktene og deres produksjon, nevnte respondentene produktmerker, bransjerapporter, dokumentarer og nettartikler som pålitelige kilder. Øko-sertifisering, sporbarhet og åpenhet om fangstmetoder ble også trukket fram som viktige faktorer. I sin helhet avdekket intervjuene en økende bevissthet og interesse for bærekraftig sjømat, drevet av bekymringer for helse, kvalitet og miljø.

Studien understreker behovet for økt tilgjengelighet og rimelige bærekraftige sjømatprodukter. Selv om forbrukere ser verdien av bærekraftig produksjon, velger mange de produktene bort til fordel for billigere alternativer. For å møte den økende etterspørselen bør sjømatindustrien tilpasse seg mer med flere og gjerne rimeligere bærekraftige alternativer. Bedrifter i bransjen bør også investere i økt kommunikasjon rundt bærekraftig sjømatproduksjon. Tydelig og tilgjengelig informasjon er avgjørende for å få opplyste forbrukere som vil verdsette de bærekraftige produktene.

# Abstract

This study investigated how sustainable seafood production can increase consumer product value. With an increase in demand for seafood and concerns about the industry's environmental impact, it is vital to understand the consumers' perception of sustainable seafood.

The main objective is to explore how sustainable production methods affect consumers' perceived value of seafood products. This includes assessing the effectiveness of measures such as eco-labelling and certifications.

The study employs in-depth interviews to collect qualitative data about consumers' perceptions, knowledge and preferences related to seafood. The interviews were analysed using theoretical frameworks such as the expectancy-value model and Woodruff's Customer Value Hierarchy.

The findings of this thesis show that consumers have a general understanding of the term "sustainable seafood production", but that their level of knowledge varies. Most perceive sustainable seafood as fresher, more ethical and nutritional than its non-sustainable counterpart. The respondents also expressed that sustainable production methods increased their perceived value of the products. Price was an important factor influencing their choices, but quality, taste, health benefits and sustainability were also central considerations.

To gather information about the products and their production methods, the respondents mentioned brands, company reports, documentaries and web articles as trusted sources. Eco-labels, traceability and capturing methods were also expressed as important factors. Taken as a whole, the interviews uncovered an increasing awareness and interest in sustainable seafood, driven by concerns for health, quality and the environment.

The study emphasises the need for increased availability and affordability of sustainable seafood products. Although consumers recognise the value of sustainable production, many opt for cheaper non-sustainable alternatives. The seafood industry should adapt to meet the growing demand by offering more sustainable options, preferably at different price ranges. Companies in the industry should also invest in better communication regarding sustainable seafood production. Clear and accessible information is crucial for enabling informed consumers who will appreciate the value of sustainable products.

## Preface

Our bachelor's thesis represents the conclusion of a three-year full-time study in the Marketing, Innovation and Management program at NTNU Ålesund. In our second year, we chose to follow the International Business path, aligning with our shared interest in sustainability and global impact.

The decision to investigate and explore sustainable seafood production stemmed from our concern for the environment and a desire to contribute to an eco-friendly future. Living in a part of Norway where the seafood industry plays a big part in society, we recognised the significance of understanding consumer perceptions and behaviours surrounding sustainable seafood products.

Through this educational journey, we have had the opportunity to work closely together, dividing the workload equally and engaging in discussions and reflections that have enriched our understanding of the subject matter. The collaborative nature of our research has allowed us to examine our analysis and interpretations, ensuring a well-rounded and all-inclusive approach.

We want to take this opportunity to express our gratitude to the five participants who generously shared their time and insights, contributing important perspectives to our study. Their contributions have been vital in shaping our findings and deepening our understanding of consumer behaviour in the sustainable seafood industry.

Furthermore, we would like to extend our gratitude and appreciation to our advisor, Njål Sivertstøl, whose guidance has been significant throughout this process. His expertise has played an important role in refining our research and ensuring its academic accuracy. We would also like to thank all the other professors and teachers who over the last three years have prepared us for this task.

Undertaking this bachelor's thesis has been incredibly rewarding and educational. It has challenged us intellectually, expanded our knowledge and renewed our interest in environmental sustainability. We sincerely hope that our findings will contribute to a better understanding of consumer perception and aid in developing more effective strategies for promoting sustainable seafood production practices. As we reflect on this writing journey, we appreciate the opportunity to dive into a topic such as this, one that feels so important. We hope that this research will inspire others to embrace sustainable practices and foster a more conscious approach to seafood harvesting and consumption.

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# 1. Introduction

The global seafood industry is at a critical stage, facing extreme pressure to adopt sustainable practices that can meet the rapidly growing demand while safeguarding marine ecosystems (Norges Sjømatråd, 2022). Global seafood demand is expected to double by 2050, creating social and environmental consequences (Naylor, 2021). This surge in demand, coupled with unsustainable fishing practices, has led to severe depletion of fish stocks, with the UN reporting that a third of the commercial fish population is overfished (unfccc, 2022).

This thesis explores the relationship between sustainable seafood production and consumer perception, investigating the factors influencing purchasing decisions and the perceived value of sustainable seafood options. By conducting in-depth qualitative interviews with consumers, this thesis seeks to understand consumer perception, preferences and choices and how sustainability impacts these.

The overarching objectives of this research are to understand consumer's perception and awareness of sustainable seafood practices, identify the key factors influencing consumer choices, and understand how sustainable practices may alter the perceived value.

The subsequent chapters of the thesis are structured as follows:

The literature review, Chapter 2, will examine existing research on the topic of consumer behaviour, the decision-making process and the role of sustainability in seafood choices. Relevant theoretical frameworks will also be presented and discussed here.

Chapter 3 outlines the qualitative method employed. Here details on the research design, participation selection and data collection method will be offered. The ethical considerations and limitations of the study will also be addressed.

Key findings from the interviews, organised into themes will be presented in Chapter 4. They will be organised into themes that directly address the research objectives. Relevant quotes and interpretations from the interviews will be provided to give more context to what we present.

Chapter 5, our discussion, integrates the findings with existing literature, highlighting similarities and differences. It will offer insights into the topics relevant to our research questions, and a conclusion to our main thesis question. Additionally, we will be reflecting upon the validity of our study, along

with its strengths and weaknesses. We will also discuss the study's limitations, along with the implications of our recommendations. We will be concluding the thesis and discuss some final remarks in Chapter 6.

Through this analysis, the thesis aims to contribute to understanding how sustainable production impacts consumer perception and decision-making in the seafood industry. The findings can inform strategies for promoting sustainable choices and increasing adaptation of environmentally friendly seafood options. Hopefully, contributing to the long-term viability of this important and impactful global industry. The thesis will also aim to fill a gap in understanding consumer perception and decision-making processes related to sustainable seafood production. While previous studies have explored consumer behaviour and sustainability preferences across various product categories, there is a need for more focused research examining the unique factors influencing seafood choices in the context of sustainable production methods. Which we hope can contribute to educational efforts and marketing strategies.

## **1.1. Background**

The seafood industry plays an important role in global food security and economic development (Bakhsh, 2023). However, the industry faces significant challenges in terms of sustainability and environmental impact. This section provides an overview of the global seafood industry, sustainable production and consumer trends shaping the industry.

### **1.1.1. The Global Seafood Industry**

As we move into a period of our world's history where the importance of sustainable development is more pressing than ever, we can see a global shift in this direction to ensure a sustainable future. This increased change is seen in every aspect of our daily lives, from our consumption, production, lifestyles, and the political landscape. As the world slowly moves away from unsustainable practices, a bigger emphasis is placed on ensuring the longevity and sustainability of the predicted “Green Industries”, which will be at the centre of our development in the coming decades (Timis, 2023). These areas of industry have been and are expected to grow in the coming years (iea50, 2021).

This shift towards sustainability is felt in nearly every major industry, especially the seafood industry. More than 3 billion people worldwide rely on the ocean as a food source, and, as stated by the BFA (Blue Food Assessment), global seafood demand is expected to double by 2050 (WWF, 2024) (Naylor,

2021). This further emphasises the importance of creating long-term, sustainable practices in this industry to ensure that the seafood industry will last for generations.

The seafood industry has historically made use of unsustainable practices and still is today (Clarke, 2024). An estimated one-third of all freshwater fish are threatened with extinction (WWF, 2021). Another major concern is habitat destruction, a result of damaging fishing methods, for example trawling nets or dredges. Ocean pollution is a major concern for marine life (Ocean Connections, 2024). The ocean has consistently been a victim of human activities. Debris, ocean mining, oil spillage and many other forms of waste impact the overall health of the ocean, including the fish that we eat (Denchak, 2022).

Over the past few decades, there has been a noticeable increase in the movement towards sustainable seafood production, driven by environmental and social challenges. Leading this effort are organisations like the Marine Stewardship Council (MSC), Aquaculture Stewardship Council (ASC) and Global Sustainable Seafood Initiative (GSSI), which establish guidelines, certify sustainable practices, and promote collaboration within the industry (MSC, 2024), (ASC, 2024), (GSSI, 2024). The increasing demand for seafood, along with the damaging practices to the ecosystem, has created an urgent need for reform within the industry. Implementing sustainable practices is vital in ensuring the viability of seafood in the long term. Research in the last few decades has shown us that seafood is a fragile, but great renewable resource which requires careful management to prevent damaging the ecosystem, as well as ourselves (WWF, 2024).

Sustainable fisheries and aquaculture practices are guided by a set of principles that integrate environmental, economic, and social dimensions. Maintaining ecosystems, conserving biodiversity, and preserving ecological balance through resource management and pollution reduction are some of the practices of the environmental dimension (FAO, 2024). Of the economic dimension ensuring economic viability through profitability, marketing, resilience, and adaptation to changing conditions are important measures to take to reach economic sustainability (FAO, 2022, p. 119). Promoting social justice by providing fair access to resources, involving communities in decision-making, ensuring fair labour, and contributing to food security are some of the factors of social sustainability (FAO, 2015), (Garforth & Brown, 2021, p. 31).

### **1.1.2. Sustainable Seafood Production**

Sustainable seafood production refers to harvesting seafood in a way that protects marine ecosystems while ensuring the food source's long-term viability. Sustainable seafood production minimises environmental impacts and ensures good working conditions and economic benefits (Seafood Watch, 2024). Creating sustainable seafood production requires a fine balance between ecological, social, and economic considerations, which has proven to be easier said than done.

Due to the importance of the ocean as an ecosystem, as well as the significant impact on the environment from seafood production, the industry is subject to increasingly strict laws and regulations (WWF, 2024), (McBride, 2023). As with most environmental measures, a conflict of interest often arises, which hinders development and progress. This is often viewed as a contest between sustainability and profitability, where the results of one come at the cost of the other (Rademacher, McCormack, King, & Suntook, 2023).

However, this does not have to be the case. Implementing sustainable measures can create a more profitable environment for companies, despite it being over a longer period. In short, seafood companies can reduce their costs and increase their profits by using renewable energy, switching to more efficient, sustainable fishing methods, or attracting new customers who value sustainable products (WWF-US, 2019). Sustainability does not have to come at the cost of profits, which we will discuss in further detail later in our thesis.

Sustainable seafood production differs from conventional seafood production by maintaining the natural balance of marine ecosystems (Folke, Kautsky, Berg, Jansson, & Troell, 1998). This includes minimising the environmental impact from all related activities, throughout the entire value chain. Taken as a whole, these efforts attempt to reverse the continuous strain on the ocean because of human activity.

### **1.1.3. Consumer Trends and Sustainability**

A more recent trend in the seafood industry is the appearance of certifications and eco-labels (Gutierrez & Thornton, 2014). These methods are used to make consumers aware of how the products are made, which has been an increasingly important factor for consumers. Consulting firm Kearney's annual "Earth Day Survey" has found a steady growth of environmental impact as a leading factor in purchasing decisions, with an 18% increase from the year 2022 to 2023 (Chafin, Breuninger, Stewart, & Carlson, 2023).

The increasing importance of sustainability for consumers can be seen as a direct effect of the increased awareness regarding climate change and our environmental impact. More specifically for seafood, sustainable options such as “farm-raised” and “wild-caught” are growing in popularity. As found by the Food Industry Association’s (FMI) “Power of Seafood” report, 70% of shoppers choose seafood because it is a sustainable food source (Jonston, 2023). Seafood is not only a sustainable source of protein, but it is also perceived as being a healthy option in the mind of the consumer.

When choosing seafood, consumers consider taste preferences, health concerns, environmental impact, and social influences. Taste and familiarity are top priorities but health benefits like omega-3 fatty acids and sustainability concerns are also important factors. Social influences, such as recommendations from trusted sources, can shape consumers’ behaviour and preferences. Increasing consumer awareness and education about sustainability issues can help bridge the gap between intentions and actual purchasing behaviour (Lebiedzińska, Kostrzewa, Ryskiewicz, Zbikowski, & Szefer, 2006). However, the impact of education on sustainable consumer behaviour is mixed, with seafood demand surging, it is more important than ever for producers to not only operate sustainably but also successfully communicate this to consumers (Naylor, 2021). These areas of sustainable seafood production will be at the centre of our discussion for this thesis.

## **1.2. Research gaps**

### **1.2.1. Identification of research gaps**

The field of consumer behaviour tries to understand how consumers make decisions and what affects their choices. The research conducted in this field tries to determine the underlying factors that influence consumer behaviour, choices and preferences.

The existing research in this field is extensive, covering the decision-making process, psychological factors and social/cultural influences. This research has helped uncover the main barriers to seafood purchases for consumers. It has also helped companies develop appropriate educational messages for the consumption of seafood. The increase in demand and consumption of seafood can be at least partially attributed to the results of this research, which in turn has led to a more informed consumer (Naylor, 2021).

Research specifically surrounding the perception of sustainable seafood is somewhat more limited, especially in Norway. Although this area has not seen a lot of activity, research into consumer demand for sustainable products has been rapidly increasing along with the overall demand for

sustainable products (Statista, 2022). As sustainability plays a more important role in our day-to-day life, it will become increasingly important for companies to invest in research surrounding this topic to better educate consumers on the benefits and need of sustainable products (Hicks, Pivarnik, & McDermott, 2008). We believe that our research will help further the understanding of what role sustainability plays in the mind of the consumer.

### 1.2.2. Consumer Perception Gaps

A key part of this thesis will be directed at how the consumers' perception of sustainable seafood production influences their behaviour. Several reasons can create this knowledge gap. Companies may have limited information available or provide limited information as to what exactly makes their products sustainable. Additionally, complex production methods and supply chains can make it difficult for the consumer to fully judge the environmental impact of products.

A lack of awareness and misunderstandings about sustainable practices and environmental issues may impact the perception of the products for the consumer. Without a clear understanding of what sustainability and sustainable production entails, consumers will have a harder time choosing products (Deloitte, 2024). As the goal of the industry should be to provide relevant information for the consumers, these perception gaps create issues for both the consumer and the companies within the industry. All these points will be explored in further detail later in our thesis.

## 1.3. Statement of the Problem

**“How can sustainable production enhance product value for consumers?: A critical analysis of perceived value addition through sustainable practices in the seafood industry”**

With the previously mentioned strain on marine life, along with the drastic increase in seafood demand and consumption, we recognize the need for research in this sector to provide understanding, education and guidance for both consumers and producers. Without a solid understanding of how sustainable practices resonate with consumers, businesses will struggle to adapt to the ever-changing mind of the consumer (Rastogi, Agarwal, & Gopal, 2024). New research directed at the effects of sustainable practices is more relevant than ever, given the increased importance of sustainability as a movement across all industries.



## 1.4. Objectives of the Study

The primary objective of this thesis is to investigate how sustainable production methods impact the perceived value of seafood products for consumers. This is a very central question that must be answered in order to impact consumer preferences and purchases. With knowledge regarding this topic, we will be able to determine how seafood producers and providers can increase market demand for sustainably produced seafood. This will in turn encourage environmentally friendly practices and increase the overall sustainability of the marine sector. Expanding on this, we aim to determine how effective these measures (such as eco-labels and certifications) are, what their impact is, and how they can potentially be improved. We will also explore the impact of these measures on the minds of the consumers, and how they perceive the value of these products. In addition, we will also explore the relationship between these two sides and investigate if the perceived value for consumers matches the real value of the products.

In addition to our primary objective, we have a range of different secondary objectives that will also be explored. A major part of our thesis question is determining to what degree consumers have an understanding and awareness of sustainably produced seafood. We will also look to identify and address the barriers that hinder consumers in choosing sustainable seafood options.

***“To what degree do consumers have an understanding and awareness of what sustainably produced seafood is?”***

***“How do sustainable measures impact the consumers' choice of seafood products?”***

***“How does consumers' perception of sustainably produced seafood compare to non-sustainable alternatives?”***

***“What are the key factors influencing the consumers' choices when choosing seafood options?”***

***“How can companies improve their products/strategy to make sustainable alternatives more appealing to consumers?”***

These secondary objectives will be key in analysing topics such as consumer choices, decision-making, product value and sustainability. While providing useful information on their own, these questions will help illuminate our main research question ***“How can sustainable production enhance***

*product value for consumers?*". Through an exploration of these research questions, we will gain valuable insights into the nuances of this topic. This will ultimately allow for a more thorough approach to our main research question. In addition to this, we hope that our research can contribute to the field of sustainability research. We hope that our findings can be useful for future studies within the field.

## 1.5. Structure of the Thesis

In the subsequent chapters of this thesis, we will be reviewing the sources used, as well as explaining our methodology for conducting qualitative interviews with consumers. We will then move on to discussing our findings, keeping in line with relevant sources and theories for this area of research. We will also be analysing the implications and impact for the seafood industry before we conclude with how we believe the industry should evolve to face the main challenges that must be overcome to ensure a sustainable future.

# 2. Literature Review

## 2.1. Theoretical Frameworks on Consumer Perception of Value

In this chapter, we will be highlighting the central theoretical frameworks and existing research that we will be using to answer our research questions. Economics, marketing, and psychology all rely heavily on understanding how consumers perceive the value of products and services. Consumer behaviour in terms of value perception involves complex processes in which customers estimate the value of a product based on a variety of qualities and personal preferences, influencing their purchasing decisions and brand loyalty.

### 2.1.1. Value Perception in Customer Behaviour Theory

One fundamental approach is the Utility Theory, which proposes that customers perceive value by assessing the utility or satisfaction supplied by a product. This utility is divided into two categories: extrinsic considerations, price, brand reputation, and functionality, and intrinsic elements, aesthetic appeal or emotional gratification (The Investopedia Team , 2023).

To further understand our research questions regarding consumer perception, we will be using Zeithaml's Perceived Value Model (1988). This model defines perceived value as a consumers' total evaluation of a product based on what is received against what is provided. According to Zeithaml, customers evaluate value by weighing the benefits, which can be both qualitative and quantitative, against the costs and effort of acquisition (Zeithaml, 1988). This is shown in Appendix 1.

This model will be used for evaluating consumers' perceived value of products. We aim to make use of this model to further our understanding of the term, which will be essential regarding our research questions.

Expectancy-Value models propose that consumer behaviour can be anticipated based on their expectations of a product and the value they assign to these expected results. Previous experiences, word-of-mouth, and marketing communications all contribute to shaping expectations. Additionally, the model explains that extrinsic and intrinsic attributes help form the perceived quality and value of products for consumers, which are at the very centre of this model. It also describes how the perceived non-monetary price and perceived sacrifice influence the perceived value, which will be central to our discussion (Kotler, 2014).

Woodruff's Customer Value Hierarchy, developed in 1997, advises that consumers evaluate not only the items themselves but also the added value they bring into their lives. This model, like the Means-End Chain Theory, depicts a hierarchy that starts with product attributes and progresses to consequential benefits before ending with end-state values (Appendix 2) (Kotler, 2014).

To address the topics of consumer choice and consumer decision-making, we will be using the Decision-Making model as described by Schiffman, Kanuk and Hansen (Appendix 3), (2012, Figure 4.2). As seen in Appendix 3, this model gives insight into the external influences, decision-making process and the post-decision behaviour of the consumer. The model will provide insights into the numerous topics relevant to our discussion.

This model summarises the consumer decision-making process, as well as highlighting the factors that influence it. It displays the external influences, such as companies' marketing efforts, and the sociocultural environment of the consumer. In addition, the psychological elements of the decision-making process are also present, shown as motivation, perception, learning, personality and attitudes (Appendix 3). This model gives a comprehensive overview of the entire decision-making process, which we will use to answer our research questions.

Finally, we will be using a combination of our findings, theoretical frameworks and existing research to answer our thesis question; ***“How do sustainable production methods impact the perceived value of seafood products for consumers?”***. This will be covered in further detail in the subsequent chapters of this thesis.

Each of these models provides useful insights into the numerous components of customer value perception, highlighting the importance of both tangible and intangible variables. Using these theoretical frameworks, marketers may develop tactics that align with consumer perceptions of value, increasing customer happiness and brand loyalty. These models also emphasise the importance of knowing individual and situational aspects that influence how consumers judge value in order to ensure that marketing efforts are effectively adjusted to meet changing consumer requirements and preferences.

### **2.1.2. Sustainability as a Value Proposition**

Sustainability plays a central role in consumer’s perceived value of seafood products, and in this perceived value, both intrinsic and extrinsic product attributes come into play.

Within the intrinsic attributes, the attributes that are part of the food, taste, freshness, and nutritional value appear to be the most significant ones. Consumers typically perceive wild-caught fish as superior in taste and freshness compared to farmed fish (Menozzi, et al., 2020), (López-Mas, et al., 2023). At the same time, wild-caught fish are often perceived as having higher nutritional value than farmed fish (Menozzi, et al., 2020).

Of the extrinsic attributes, attributes that belong to (but are not a part of) the food, eco-labels and sustainability certification, production method (wild vs. farmed), organic and animal welfare claims, and country of origin played the most part. Eco-labels and sustainability certifications like Marine Stewardship Council (MSC) are extrinsic clues that positively influence consumers’ perceived value. A study out of Italy shows consumers are willing to pay premiums of 10-24% for eco-labelled seafood, as they associate these labels with environmental protection, sustainable fishing protection and quality (Vitale, et al., 2020). A study done in Canada confirms this, as it displays participants exhibiting a willingness to pay more for certified sustainable seafood. The study found that 40% of respondents expressed their willingness, compared to 24,2% who disagreed (Colombo & Charlebois, 2023).

The production method (wild vs. farmed) is another essential attribute. While some consumers prefer wild-caught fish due to perceived superiority in taste, safety and nutrition, others perceive

farmed fish as more sustainable, locally obtained and providing environmental benefits (Menozzi, et al., 2020), (López-Mas, et al., 2023). This divergence in perceptions can be exemplified through the Canadian study. There, despite the strong preference for wild seafood, most Canadians implied that farmed seafood is perceived as more sustainable. However, income played a significant role in this perception. The study states that “...with only 35.6% of respondents overall considering fish farming to be sustainable. Those with household incomes exceeding \$150,000 showed the highest agreement at 53.3%, followed by the \$35,000-\$74,999 bracket at 50.2%, and the \$75,000-\$149,000 bracket at 48.6%.” (Colombo & Charlebois, 2023).

### **2.1.3. Social and Environmental Value in Consumer Choice**

Social and environmental values play an increasingly important role in shaping consumer purchasing behaviour and consumers are becoming more aware of how their choices impact the environment.

Social value, in this setting, refers to the perceived benefit of a product in enhancing one’s social image or gaining social approval. Consumers express themselves and seek social acceptance by purchasing products aligned with societal values and norms. This goes for everything, not only fish products, as is discussed in this study. One example is that buying organic or Fairtrade products can signal one’s commitment to sustainability and ethical practices, thereby elevating social status (Fairtrade, 2021).

Environmental values are different to social ones as they represent the perceived benefit of a product in reducing negative environmental impacts. Consumers with higher environmental concerns are far more likely to choose eco-friendly products than those who are not and they do so even at a premium price. These values influence consumer decisions as customers aim to minimize the dissonance between their environmental beliefs and consumer behaviour (Khan & Mohsin, 2017).

Together these social and environmental values influence consumer choice and decision making. Consumers evaluate products based on different value dimensions, functional (e.g. price), emotional, epistemic and social/environmental values, and they take part in shaping consumer preferences (Sun, Safdar, Jaffri, Ibn-ul-Hassan, & Ozturk, 2022). Notably, studies have shown that social sustainability issues may have a stronger impact on consumer preferences than environmental concerns due to their psychological proximity and direct closeness to consumers’ daily lives (Quoc Viet, de Leeuw, & van Herpen, 2023). However, both social and environmental values contribute to the overall value perception and the following consumption choices.

## 2.2. Understanding Seafood Value Perception: Comparative Studies

### Highlight Key Factors

The existing research in the field of value perception relating to seafood is somewhat scarce. The comparative analyses are in general broader and focus on understanding value perception for all products and decisions that consumers make.

The first study we will be using is an Italian paper published in 2020, which aims to understand consumers' perception and willingness to pay for eco-labelled seafood in Italian hypermarkets, using quantitative research. This study has found that consumers associate eco-labels with sustainability and environmental protection. It has also found that consumers perceive eco-labels as a sign of higher quality and that they are willing to pay between 10 - 24% more for these products. It has also been found that the willingness to pay for these products relates to factors such as gender, family situation, environmental features, stores and available information (Vitale, et al., 2020).

A similar study from Dalhousie University in Canada highlights how different methods of seafood farming are perceived by consumers. This study has found that Canadian consumers show a preference for wild seafood but perceive farmed seafood as the more sustainable method. This, however, varied with household income. When asked if they were willing to pay a premium for certified sustainable seafood, 40% of the respondents said yes. Additionally, this study found that 54% of the respondents said they considered environment and climate change when making food choices, with an increase for the age group 18 - 29 years, at 60% (Colombo & Charlebois, 2023).

Another study, published by the National Library of Medicine, aims to understand consumers' perceptions of fish products, with the goal of increasing seafood consumption. This study examined the willingness to pay for different fish types for consumers in five different European countries: France, Germany, Italy, Spain and the UK. The findings from this study showed that consumers again preferred wild-caught fish, as in the Canadian study. Wild-caught fish was perceived as being fresher and superior in taste and was even perceived as having better nutritional value than its farmed counterpart (Menozzi, et al., 2020).

Lastly, we will be using a Danish study of consumers' food choices and quality perception. Although not specifically targeted at seafood, the information gathered is still vital to understanding consumer choices as a whole. This study is aimed at determining the relationship between price and quality for consumers. It has been found that consumer expectations and demands vary greatly and that the quality of food products is subjective. It has also determined that price is a determining factor for

consumers' choices. What is perhaps the most important finding of this study is that available information is a central aspect of communicating the value of a product, and ultimately determines the value it has in the mind of the consumer (Brunsø, Fjord, & Grunert, 2002).

This section has provided a brief overview of the main studies we will be supplementing our findings with. These studies will be used comparatively with the findings from this thesis, through methodical triangulation. Our methods for this will be explained in further detail in Chapter 3.

## 2.3. Summary

In short, our literature review covers the central theoretical frameworks that we will be using to answer our research questions. Through the use of these models, we will be focusing on consumer perception and decision-making to understand the relationship between consumers and sustainability. We have also explained how sustainability impacts the consumers' value of products, and how social and environmental factors influence their choices.

Additionally, we have presented existing research within the field of sustainability and seafood, which we will be measuring our findings against. These quantitative studies cover a broad variety of concepts, ranging from value and quality perception to sustainability as a factor influencing choices. They also cover the impact of eco-labels in impacting consumers' willingness to pay. These studies, along with the theoretical frameworks, will form the basis on which our discussion will be held.

Lastly, we hope that our research will provide value to the field of consumer behaviour research. As our research targets the lesser-known topic of sustainability perception, we believe that our discoveries may positively impact the field, and further our understanding of these concepts.

## 3. Methodology

In this chapter, we will be conducting a case study with the use of qualitative research. Our goal with this study is to gather relevant information on the complexities of consumer perception regarding sustainable seafood production. We hope that our findings will further add to the viability and applicability of our thesis, in addition to further expanding research in the field of consumer behaviour.

### 3.1. Research Design

While developing our research design, we concluded with a qualitative research method as being the best choice for this study. The reason why we chose this method is because we have assessed the topic of sustainable seafood to be niche and far less discussed than other more widely known topics. This makes a qualitative approach more suited for this topic (Fossey, Harvey, Mcdermott, & Davidson, 2002).

In this study, we aim to understand the underlying factors that influence consumer decisions regarding seafood purchases, along with their own interpretations of the term. We wish not just to understand *what* decisions are made, but also *why* they are made. For example, gathering data on how many consumers choose sustainable seafood options may be useful to some degree, but provides no information on the reasoning behind purchases. As sustainability is a relatively new term in the field, we see it as far more important to gather information on the consumers understanding, attitudes, behaviours and preferences towards the term, all of which cannot easily be measured by numbers (Hammarberg, Kirkman, & de Lacey, 2016).

The qualitative research paradigm will help uncover these underlying factors, and further our understanding of the term sustainability as understood by the consumer. In contrast to quantitative research methods, the qualitative method allows for more rich, detailed insights into consumer behaviour (Fossey, Harvey, Mcdermott, & Davidson, 2002).

Qualitative research methods vary greatly in form and execution. Interviews, focus groups and observations are all viable qualitative research methods aimed at capturing detailed data surrounding a given topic.

### 3.2. Data Collection Methods

For this study, we have chosen a qualitative research method. As different studies have explored the field of consumer behaviour using both quantitative and qualitative research methods, we believe that a qualitative approach is the most appropriate for a more niche part of the field. Our reasoning for this, along with the implications and limitations of conducting qualitative research, will be discussed in further detail in the subsequent chapter.



### 3.2.1. Semi-Structured Interviews

As mentioned we determined that semi-structured interviews would be best suited for our needs. This interview type is an in-depth interview where the participants answer open-ended questions. Semi-structured interviews are widely used and only conducted once per participant or group of participants. It is based on an interview guide, which helps to keep the interviewer focused on the desired line of action (Jamshed, 2014). While still using a set of predetermined questions, we were able to form our interviews into a more normal type of conversation. The semi-structured interviews allow for a flexible method of interviewing. In addition to asking our primary questions, we were able to ask follow-up questions where relevant. This is done to further understand each participant's line of reasoning, as well as to create unique discoveries and answers from our participants (Kallio, Pietilä , Johnson, & Kangasniemi, 2016).

Through this type of interview, we would further encourage open and honest answers. By using this structure, the participants were able to express themselves freely, without being limited by deterministic questions. At several points in our interviews, we found participants actively engaging with and discussing the topic in detail, which we believe has yielded rich, detailed data. This allowed for further understanding of the underlying factors influencing their choices, as well as providing unique responses from all our participants.

### 3.2.2. Design of Interview Guide

The main objective of our interview guide is to answer our research questions, as seen in Chapter 1.4. As we are conducting semi-structured interviews, we have designed our interview guide to have room for follow-up questions. As seen in our interview guide (Appendix 4), the main topics are seafood habits, understanding of sustainable seafood, impact on perceived value, consumer awareness, factors influencing consumer choices, comparison with non-sustainable alternatives, and finally key influences and preferences.

The questions used in our interview guide were developed to provide the most amount of information possible, while still staying relatively simple and easy to understand for our participants. We made sure to avoid yes/no questions, instead using open-ended questions, as we are interested in how each individual interprets our questions, and how they would answer them in their own words. Furthermore, we avoided “double-barrelled” questions, limiting each question to a single topic. This is done to increase our respondents' understanding of the question and to ensure a

specific answer (Menold, 2020). Lastly, we avoided leading questions, as to limit the desirability bias that may occur in these types of interviews (Fisher, 1993). This also encourages honest responses.

Through our interview guide development techniques, we have limited the potential shortcomings of our interviews. We believe that the research guide gives a thorough understanding of what these concepts mean to our participants, including how they are interpreted by them. Through the insights gained in these topics, we believe that we can establish a connection between our participants' answers and our research questions.

### **3.4. Participant Selection**

We utilised a selective sampling strategy to ensure a diverse representation of perspectives on the subject. We deliberately selected five individuals we were already acquainted with, but without prior knowledge of their food habits or preferences. This was done to achieve a broad age representation and to provide as equal gender distribution as possible. The youngest participant is 23 years old and the oldest is 57, and we have three women and two men as our participants.

We believe that five people is sufficient for our study, given the depth of our interviews. The answers we received were comprehensive and descriptive, without reaching a point of saturation. Also, evaluating both the resources, time and scope of this thesis, five participants were adequate to include in our research.

The participants were recruited through our contacts, a form of selective sampling. This method was chosen to access a sample that fits with our wishes and our purpose for this study. Selective sampling is a non-probability method used when researchers deliberately select participants who are considered representative or information-rich for what is being studied (Deep Checks , 2024). Overall, the sampling strategy and recruitment methods used were appropriate for a study such as this one, while also ensuring a certain breadth of perspectives and representation.

## 3.5. Data Analysis

### 3.5.1. Coding and Thematic Analysis

To structure our findings from our interviews, we divided the findings into seven main categories, which can be seen in Chapter 4 of this thesis. These topics largely follow the interview guide, which again has been created based on our research questions. The goal of these topics is to structure the findings from each interview into categories, which allows for a clearer and more concise understanding of what our respondents have answered.

We have also evaluated each interview individually, to better contextualize the answers in the context of which they were answered, regarding the individuals' understanding of the questions. By structuring our findings, we can easily draw parallels, and determine commonalities between our respondents' answers. A thorough analysis of these answers will be found in Chapter 4.

### 3.5.2. Triangulation

To further add to the validity of our findings from our interviews, we will be using methodical triangulation. Methodical triangulation, as described by Norman K. Denzin in the book *"The Research Act"*, is the use of multiple methods to study a specific phenomenon (Denzin, 2024). As qualitative research is characterised by its specific and detailed data, it lacks the quantity required for generalisation to the broader population. By supplementing our data with secondary data and existing sources, we judge that we can create a cohesive understanding of the topics in question.

In this thesis, we will be combining the findings from our research with comparative analyses. These studies, as seen in Chapter 2.2, give a broad understanding of the different themes included in this thesis. As many of them have gathered quantitative data, we will attempt to combine their findings with our own, in an attempt to create a comprehensive understanding.

Through this use of methodical triangulation, we hope that we can increase the validity of our discoveries. Although we would still be hesitant to generalise our findings, we believe that through using methodical triangulation, it would be possible to cross-validate our discoveries. This will help strengthen our confidence in our gathered information and increase its overall applicability and validity. Furthermore, methodical triangulation will also help us detect inconsistencies in our data, which can highlight areas that should be discarded or improved upon (Campbell, Goodman-Williams, Feeney, & Fehler-Cabral, 2018).

## 3.6. Ethical Considerations

### Informed Consent

Obtaining informed consent is a critical ethical requirement. We informed the participants about the purpose of the study and the methods we would be using. Consent must be voluntary and this was given by everyone before the interview started. The participants also have the right to withdraw at any time, both during the interview and after. So, if they didn't want us to use their interview in our study, they could inform us of this at any time before the submission date. The option to skip one or several questions was also communicated beforehand. When we first approached the participants and questioned if they wanted to partake, we did so with sufficient time for them to deliberate participation. We obtained confirmation that they understood and agreed to what was asked of them in this study (Complete Dissertation, 2024).

### Confidentiality and Privacy

Protecting the confidentiality of participants and the data they provide is paramount. We must take steps to prevent unauthorised access to our data and avoid disclosing identifying information in the publication of this study. Anonymity must be ensured whenever possible (Complete Dissertation, 2024).

### Research Integrity

We as researchers must act with honesty, transparency, and integrity. We must avoid conflict of interest, biases and misrepresenting findings. Fidelity and trust are important in our researcher-participant relationship. We must conduct ourselves in a way that makes the participants feel that they can be open and honest in their answers.

In a study where emotional distress would be more likely to occur, we would discuss the importance of minimising harm. As we feel that this is not relevant to this study, we will not be devoting time to the subject (Hecker & Kalpokas, 2024).

## 3.7. Limitations of the Qualitative Approach

When conducting research using qualitative research, it is important to understand its strengths and weaknesses as a research method. As we have previously discussed our reasoning for selecting a qualitative research method, with its rich and detailed data, we will now highlight some of the main limitations of this research method.

Firstly, the main hurdle for qualitative research is that it is hard to generalise the findings to the rest of the population. The qualitative method sacrifices quantity for quality, which often makes the data inadequate for generalisation. When working with a small sample size, it is important to be aware of the limitations it places on the results of the research. Qualitative data will often be used as a supplement to quantitative data, to cross-validate findings, or to contextualise concepts found in other studies. Although there are areas of use where qualitative data is valuable, it should be used carefully when trying to generalise. Misuse of qualitative data can lead to faulty information or invalid conclusions drawn from these findings (Light, 1971).

Another limitation of qualitative data is that the process of gathering data is often time-consuming and labour-intensive. As experienced from the data collection for this thesis, collecting qualitative data is a resource-intensive process. Creating an interview guide, developing questions that encompass all relevant topics and conducting face-to-face interviews can be a lengthy and somewhat difficult task. Additionally, when evaluating concepts without clear definitions, interpreting results may be difficult. The respondents may have a different understanding of certain concepts, as they are subjectively evaluated for each respondent. This can create challenges when evaluating answers, which may further complicate the findings, if they are based on flawed interpretations.

Lastly, qualitative data collection methods are, along with other methods, subject to researcher bias. Researcher bias describes the influence the researcher may have on the study, in the form of personal beliefs, expectations or desires. As for all research methods, it is important to maintain objectivity and stay aware of the potential for biases. This can be done through peer reviews, use of secondary sources and maintaining transparency in the research method. Researcher bias is especially prevalent in face-to-face interviews, as the researcher may directly or indirectly affect the results of the study (Hammarberg, Kirkman, & de Lacey, 2016).

### **3.8. Summary**

The methodology chapter for this thesis contains a comprehensive review of our data collection, along with our method of data analysis. We have also reasoned our choice for in-depth interviews and discussed the implications of these methods of research. We believe that this method will be able to capture the depth and complexity of consumer perception and decision-making.

We have also highlighted the limitations of the qualitative method, as well as the ethical considerations for our study. Through cautious use of our selected methods, we can put them to use to gather not just better information, but also handle our findings efficiently and effectively. We believe that our research method provides a solid ground for a thorough analysis of this thesis' topics.

## 4. Result/Analysis

### Understanding of Sustainable Seafood

Most of our participants had a general understanding that sustainable seafood refers to fish and marine life harvested in a way that doesn't deplete populations or harm the environment, in turn ensuring future availability. However, their level of familiarity and understanding of specific sustainable fishing or aquaculture practices varied. The 57-year-old man defines it as "Seafood sourced in a way that doesn't exhaust the fish population or harm the environment. ... making sure that future generations can enjoy it." The 49-year-old woman defined it similarly: "It [Sustainable Seafood] means that fish and other ocean life is caught in a way that doesn't harm the environment."

### Impact on Perceived Value

There was an agreement among our participants that sustainable production methods increased the perceived value. All participants associated sustainable seafood with being fresher, more ethical and better for their health. The 57-year-old man stated "They [sustainable methods] increase the value, definitely. Knowing that it's harvested responsibly makes it worth paying more for." The 25-year-old male student echoed this sentiment "Sustainable seafood is viewed as having higher quality, why wouldn't I want it?".

### Willingness to Pay a Premium

Most of our participants expressed willingness to pay a premium for sustainable seafood. Better quality and health and environmental benefits were some of the stated reasons. However, some raised budget concerns as a limiting factor, especially for those with families or on a tighter budget. The 57-year-old man and the 53-year-old woman had similar sentiments stating that "I would [pay a premium]. I believe in paying for quality" and "Absolutely. Quality is important to me in my cooking, and I want the best ingredients, they always give me the best starting point.". While these two shared the majority's point of view, the 23-year-old female student had this to say about the matter, "I would like to support sustainable practices, but my budget often limits my choices." The 49-year-

old woman shared this sentiment, “I would like to [buy sustainable], but our budget makes the choice for us. If the price difference isn’t too high, I would consider it.”

### **Consumer Awareness**

The participants acknowledge different levels of consumer awareness regarding sustainable seafood, with some being well-informed and others lacking a comprehensive understanding. They mentioned product labels, industry reports, documentaries and online articles as trusted sources for learning about sustainability. The 49-year-old woman felt “Awareness varies. Many people know it’s important but don’t understand the details”. The 25-year-old male student said, “Some prioritise it [sustainability], while others focus more on taste and price.”

### **Factors Influencing Choices**

Price was a major factor influencing seafood choice, especially for those on a budget. However, quality, taste preferences, health benefits and sustainability were also important considerations among the participants. For some sustainability was a top priority, for others, it became an option if affordable alternatives were available. This resonates with the 49-year-old woman who said “Price, taste preferences of my family and health benefits” were deciding factors when purchasing seafood. The 53-year-old woman cited “Quality, freshness and sustainability.” as key factors in her seafood choices.

### **Comparison with Non-sustainable Alternatives**

Among our participants, sustainably produced seafood was perceived as fresher, more ethical and likely more nutritious compared to non-sustainable alternatives. The 57-year-old said, “Sustainably produced seafood feels like a more ethical choice and is generally fresher.” The 25-year-old male student believed “It likely tastes better, maybe because it’s fresher and more carefully handled?”. Some participants consciously avoided certain seafood products due to sustainability concerns. The 25-year-old female student had this answer when asked about it “Yes, I try to avoid seafood that is known to be overfished or harvested in harmful ways” She mentioned how tuna is being overfished, and how it’s difficult to know if the tuna comes from endangered species, therefore a general rule of hers was to avoid it all.

### **Key Influences and Preferences**

Eco-certifications, transparent fishing methods and traceability were cited as important aspects of sustainable seafood production. The 57-year-old man valued freshness and eco-certification, while the 23-year-old female student appreciated the price, eco-labels and sustainability. While taste

differences were not always noticeable, many participants believed sustainable seafood to taste better due to fresh sourcing and better handling practices.

The Interviews highlight a growing awareness and interest in sustainable seafood. This is driven by concerns for health, quality and environmental responsibility, how the interest appeared, however, was different among them. Recommendations from a doctor to change his diet (57m), a wish for fresher ingredients (53f) and a general environmental concern (23f) were among them. However, affordability remains a barrier for some, emphasising the need for accessible and reasonably priced sustainable options.

## 5. Discussion

### 5.1. Introduction

In this chapter, we will be discussing and evaluating our findings in relation to our primary and secondary research questions. We will make use of the relevant theoretical frameworks and secondary sources to illuminate the different aspects of our findings. We will discuss what these discoveries mean and explore the possible implications they may pose for the field of consumer behaviour research.

We will discuss and answer our research questions, to answer our main research question: *“How can sustainable production enhance product value for consumers?”*. Additionally, we will be evaluating the validity of our study, highlighting both its strengths and weaknesses. We will also be covering the potential limitations and implications of this study, with an emphasis on research method, generalisation and use of findings.

#### Triangulation

As mentioned before, we will be using methodical triangulation to further the validity and applicability of our findings. This means that we will be viewing our findings in relation to secondary sources, our selected theoretical frameworks and quantitative studies. We believe that this will benefit this study, and potentially demonstrate a correlation between qualitative insights and quantitative trends.



## 5.2. Key Findings

The most important findings from our study were that most of our participants had a general understanding of what the term sustainable seafood entailed, but their level of familiarity varied. In general, sustainably produced seafood was perceived as fresher, more ethical and likely more nutritious than non-sustainable alternatives.

All of our respondents said that sustainable production methods increased their perceived value of the products. They also said that they would be willing to pay a premium for sustainably produced seafood, but this is where the trade-off between quality and price appeared. For the consumer choices, the price was a major factor. However, quality, taste, health benefits and sustainability were also important. Many of our respondents also believed that sustainable seafood tasted better due to fresh sourcing and better handling practices.

For gathering information on sustainable production, our respondents mentioned product labels, industry reports, documentaries and online articles as trusted sources for learning about sustainability. Other than this, eco-certifications, transparent fishing methods and traceability were also cited as important for sustainable production.

In general, these interviews highlighted a growing awareness and interest in sustainable seafood. This was driven by increasing concerns for health, quality and environmental awareness. Our interviews found a demand for sustainably produced seafood, where affordability was the main barrier for some. We believe that this emphasises the need for increased accessibility and reasonably priced sustainable seafood options.

## 5.3. Consumer Perception of Sustainably Produced Seafood

In the first part of this chapter, we will be discussing consumer perception of sustainably produced seafood. We will be using the Utility Theory, and Zeithaml's Perceived Value Model (1988) to structure this segment (The Investopedia Team , 2023). In addition, we will be using the previously mentioned Italian study of consumers' perception and willingness to pay for eco-labelled seafood in Italian hypermarkets, and the Canadian study from Dalhousie University (Vitale, et al., 2020), (Colombo & Charlebois, 2023). The central research questions for this segment are: *“To what degree do consumers have an understanding and awareness of what sustainably produced seafood is?”*, and

*“How does consumer's perception of sustainably produced seafood compare to non-sustainable alternatives?”.*

We will be viewing the results of these questions together to evaluate the perception of sustainably produced seafood as a whole for our interviews.

### **5.3.1. To what degree do consumers have an understanding and awareness of what sustainably produced seafood is?**

Regarding the concept of sustainably produced seafood, all our respondents had at least some relation to this term. Our respondents had the common perception that sustainably produced seafood refers to methods of harvesting seafood in a way that maintains populations and doesn't harm the environment. In addition to this, our respondents had certain connections to the term. What was heard the most were its ties to climate change, futureproofing for the next generation and seafood's value as a renewable food source.

From our interviews, it was clear that the respondents had developed opinions regarding this topic, preceding our interviews. Their level of knowledge and specific aspects of sustainable fishing, however, varied to some extent. In general our respondents lacked information on the specifics of what sustainable seafood farming entailed, along with how they could discern sustainably produced seafood from non-sustainable alternatives.

Our understanding of these results is that our respondents' opinions regarding sustainably produced seafood were in favour of sustainable production methods. While they went to great lengths explaining the benefits of this, we believe that their knowledge was insufficient for a comprehensive understanding of the term. We believe that these findings show a lack of knowledge of the specifics of how sustainable seafood production is conducted. This highlights a need for making information regarding this topic more accessible and prevalent for consumers.

### **5.3.2. How does consumers' perception of sustainably produced seafood compare to non-sustainable alternatives?**

Sustainably produced seafood was largely perceived as superior compared to non-sustainable alternatives by our respondents. The answers we received expressed that sustainably produced seafood was perceived as fresher, more nutritious and generally of higher quality than its counterpart. Some also stated that it was the more ethical choice between the two options. Our

respondents discerned the two options by evaluating eco-labels, production methods and traceability when buying sustainably produced seafood, although this was not a priority for some.

Others expressed their willingness to pay a premium for sustainably produced seafood, while some said they were limited by the price of these products. As sustainable products often come at a higher price than those that don't, price is often a major hurdle for developing environmentally friendly products. We observed this to be true for our respondents, as multiple people expressed that their reason for choosing non-sustainable options came from the cheaper price, rather than disregard for sustainably produced items.

From our interviews, it was clear that our respondents perceived sustainability as superior for a variety of reasons. However, when it came to actually purchasing sustainable items, many felt forced to settle for cheaper options: *"... my budget often limits my choices"*, and *"... our budget makes the choice for us"*. Through our discoveries, we have concluded that the trade-off between quality and price is the main hurdle for most consumers, given the higher price of sustainable seafood products. Our findings indicate that there is not a reluctance to buy sustainable seafood, it is rather an issue of price.

### **5.3.3. Theoretical View of Consumer Perception**

When viewing these findings in the context of Zeithaml's Perceived Value Model (Appendix 1), we can deduce a relationship between the perceived quality and the price of the product. In this model, the «price» of the product consists of the objective price of the product, the perceived monetary price, and the perceived non-monetary price. These factors all weigh in on determining the perceived "sacrifice", in other words, what one must give to receive the product.

If we view this in accordance with the findings from our research, we can tell that there are several layers for the evaluation of a product's perceived value. Firstly, the objective value of the product plays a central role. As we have observed in our interviews, the objective value of the products is often a significant factor in determining which product our respondents bought. In addition to this, consumers also evaluate the perceived monetary value, which is the value that is obtained in accordance with the price/quality ratio. Our discoveries have found that some respondents show a willingness to pay more for a higher quality product. Lastly, the perceived non-monetary price describes the cost of buying a product, other than money. For example, some of our respondents explained that sustainable seafood options were the more ethical choice of the two options. This

shows that there is a relationship between what is ethical and what is practical, which must be judged by the consumer.

Looking at the extrinsic and intrinsic attributes of the model, we can tell that these factors also weigh in on the perceived value of the product. Our respondents mentioned several of these attributes: brand reputation, knowledge of production methods and sustainability. We believe that the consumers' knowledge regarding these topics are insufficient to fully evaluate the value of sustainably produced products. As correct information is vital in making concise choices, consumers must be met with clear, available information to make better decisions for themselves.

Our interpretation of these answers is largely supported by the Italian study of consumers' perception and willingness to pay for eco-labelled seafood in Italian hypermarkets (Vitale, et al., 2020). This quantitative study has found that consumers associate eco-labels with higher quality and that they are willing to pay a premium for these products. This mirrors our findings, as we have found that most of our respondents also show this willingness, strengthening our claim that consumers are willing to pay more for sustainable products.

In addition to this, the Canadian study from Dalhousie University has also found that consumers are willing to pay more for sustainable products (Colombo & Charlebois, 2023). The study also found that consumers evaluated environmental impact as a factor influencing their choices of seafood products, but still placing price at the front of the discussion for most consumers. This supports our claim that environmental factors also influence the perceived cost of a product, in addition to its overall value.

To summarise this section, we have determined how consumers understand sustainably produced seafood, along with how they evaluate sustainably produced seafood in comparison to non-sustainable alternatives. Although our respondents showed a general understanding of the term "sustainably produced seafood", we realise that their knowledge fell short of a comprehensive understanding of the specifics of this term.

When it comes to their evaluation of sustainable seafood compared to non-sustainable alternatives, we found a clear preference for sustainably produced seafood. This, however, was limited by price as the major hurdle for most consumers. The implications of these findings will be revisited in Chapter 5.5.

## 5.4. Consumer Choice and Decision-Making for Sustainably Produced Seafood

In this part, we will be discussing decision-making and consumer choices regarding sustainably produced seafood. For this section, we will be making use of Woodruff's Customer Value Hierarchy (Appendix 2), along with the Decision-Making model as described by Schiffman, Kanuk and Hansen (Appendix 3). Through the use of these two models, we will be able to properly analyse and structure our findings. In addition to these models, we will be using a study published by the National Library of Medicine, and the Danish study of consumers' food choices and quality perception (Menozzi, et al., 2020), (Brunsø, Fjord, & Grunert, 2002). In this part, we will be analysing and answering the following research questions: *“What are the key factors influencing the consumers’ choices when choosing seafood options?”*, and *“How do sustainable measures impact the consumers' choice of seafood products?”*.

### 5.4.1. What are the key factors influencing the consumers’ choices when choosing seafood options?

From our interviews, we have determined several key factors that influence consumer choices for seafood options. Aside from price, our respondents also highlighted quality, taste preferences, health benefits and brand image as other determining factors. This was paired with transparent fishing methods and traceability of products. It was clear from the answers that we received that brand image was a deciding factor for many. Our respondents also listed environmental factors as being part of their evaluation when choosing seafood.

In addition to these factors, it became apparent that several respondents chose environmentally friendly products due to it being more ethical. Some of them viewed it as a way to partake in the green shift, as well as a method of adapting more sustainable habits.

Based on these answers, we determined that many factors weigh into the consumer's choice of seafood. Despite the price being the main factor, we found that many chose to buy seafood for the health benefits. This was further reinforced by the common perception that sustainably produced seafood was fresher and more nutritious, although this could just as well be explained by a higher price than regular seafood.

Another major factor was brand loyalty and brand image. Based on our findings, we believe that brand image plays a central role in building trust between the company and the consumers. Several respondents had preferred brands that they would repeatedly choose over others, be it for taste, quality or price. We believe that this highlights the importance of sustainable practices and transparency for companies with the goal of building lasting customer relations.

#### **5.4.2. How do sustainable measures impact the consumers' choice of seafood products?**

Regarding sustainable measures' impact on consumers' choices, our respondents expressed that eco-certifications, sustainability and transparency in fishing methods were important factors for their choices. This is also tied to brand loyalty, as described above. Our respondents consistently chose products from companies they trusted, with some stating that certain brands appeared more sustainable and environmentally friendly than others.

Although our respondents expressed that these were important factors, they were again in conflict with the higher price of sustainable seafood products.

Through our interviews, we found that sustainable measures greatly improved both the perceived value of products and customer satisfaction with them. It was clear from the answers we received that environmental factors were considered, although they were often overshadowed by the lower price and availability of non-sustainable options. Based on these answers, we have determined that while there is an increasing demand for sustainable options for seafood, they lack the comprehensive adaptation by the sector that is needed to provide greater availability and a lower price.

#### **5.4.3. Theoretical view of decision making and consumer choice**

When we view our findings in relation to the Customer Value Hierarchy (Appendix 2), we can determine that consumers not only value the products themselves but also the value that these products bring into their lives. As the demand for sustainable products increases, more and more consumers will find value in adapting their consumption to more sustainable practices (Statista, 2022). This goes hand in hand with our findings that tie sustainable products to greater product value for consumers.

When seen in light of the Decision-Making model (Appendix 3), it is clear that sustainable practices greatly impact consumer decision-making. If we take a look at the psychological aspects, motivation,

perception, learning and attitudes are all impacted by a higher demand for sustainable products. This also includes the other mentioned factors of health benefits and nutrition.

Brand loyalty and image are shown in the external influences section of the model, in the firms' marketing efforts. This part underlines the important part companies have in affecting consumer choices through their product, promotion, prices and distribution channels. As mentioned before, we believe that this area should take priority for the maritime sector. Companies can directly adhere to consumer demand and preferences through their marketing efforts. Building a loyal customer base will be essential in strengthening customer relations for many companies.

It is also worth mentioning that sustainably produced seafood weighs in on the sociocultural environment of the consumer. As stated before, many consumers, including the ones in our study, feel a desire to adapt to more sustainable practices. This strengthens our claim that with the increased demand for sustainable products, companies should adopt new practices to meet the expectations of the consumer.

These findings are largely supported by the Danish study of consumers' food choices and quality perception (Brunsø, Fjord, & Grunert, 2002). This study has again confirmed price to be a leading factor for product choices. It has also found that available information (information regarding the product) plays a central role in communication between the company and the consumer. In addition to this, it concludes that information and communication determine the perceived value of the product for the consumer.

This further emphasizes the role of the company in creating clear and effective communication through its various channels.

As for the factors influencing consumer choices, the study by the National Library of Medicine highlights the consumer preference for wild-caught seafood, while maintaining that farmed seafood is viewed as the more sustainable option (Menozzi, et al., 2020). This discovery differs from our findings, where our respondents preferred sustainably produced seafood over the wild-caught alternative. The study also found that willingness to pay increased with sustainable alternatives, which again shows an increase in demand for sustainable options (Statista, 2022).

To summarise, we have discovered the key factors influencing consumer choices of seafood. As price is the main determinant, we also found that health benefits played a significant role. In addition to taste preferences, brand image was also important for many. It was also clear that sustainability and

sustainable production methods greatly impacted consumer choices, as some wish to partake in more sustainable practices. Sustainable options were also viewed as more ethical than others.

Sustainable production methods were shown to improve both the perceived value of products, along with customer satisfaction with those products. We found that although there is an increase in demand for these types of products, the minimal adaptation of the sector limits the availability and accessibility of these products for many consumers.

## 5.5. Recommendations for enhanced sustainable alternatives

In this section, we will be discussing recommendations for companies to further their sustainability efforts and better appeal to consumers, by answering our secondary research question: *“How can companies improve their products/strategy to make sustainable alternatives more appealing to consumers?”*. This section is divided into what we believe are the most important steps to create and implement sustainable practices. These suggestions have been developed through the analysis of our findings combined with our chosen secondary data.

### 5.5.1. Adaptation of Sustainable Practices

Firstly, we would recommend an adaptation of sustainable practices. This can be done through creating sustainable seafood farming methods, increasing their transparency and responsible sourcing of materials. Sustainable practices require a thorough analysis of the companies' actions, value chains and supply chains. To fully adapt to sustainability, companies must implement sustainability as a central aspect of the companies' goals and visions.

As sustainable operations are often more demanding in both resources and time, there is a perception that these methods are more costly than others (Rademacher, McCormack, King, & Suntook, 2023). Despite this, there are many ways in which the adaptation of sustainable practices can benefit companies. They can attract new consumer segments by supplying sustainable products that others don't. They can also improve their brand image by adhering to sustainable practices, displaying corporate social responsibility as a result. Through these methods, companies can strengthen their position in the market and better appeal to the needs of the consumer, which can in turn lead to a competitive advantage.

In addition, the adaptation of these practices makes the companies better suited for the development of the sector. As the maritime industry is constantly facing new laws and regulations,



this will make it easier for companies to adapt to new judicial requirements (WWF, 2024). By adapting these methods early, companies will be better equipped for these changes and can future-proof their activities. This can also cut costs for the companies in the long run, which may let them provide cheaper products.

### **5.5.2. Increase Information, Communicate Message**

Previously in this chapter, we have determined information to be a central part of the consumers' decision-making process, and that many lack information on both the seafood products available and the sector as a whole. It is because of this that we determined that increasing available information is a crucial step in making sustainable products more appealing to consumers.

If we again direct our attention to the Decision-Making model (Appendix 3), we can tell that supplying information to consumers plays a significant role in their decision-making process. Along with this, supplying information is a part of the companies marketing efforts, and plays into the external influences of the decision-making process. This is further supported by the Danish study of consumers' food choices and quality perception, which found that available information influenced the product value for the consumer (Brunnsø, Fjord, & Grunert, 2002). This highlights the important role information plays for both the company and the consumer.

Companies can further their communication efforts by investing in sustainability and implementing it as a central part of their operations. Companies should also aim to provide clear communication about their products, as well as their production methods. Again, transparency in supply chain methods will increase both the company's brand image and the trust it can build with consumers.

### **5.5.3. Brand Image**

As stated several times by our respondents, brand image was a central part of their decision-making. Maintaining a positive brand image is a central part of building trust between the company and the consumer. By improving their image, companies can create loyal customer bases which will increase their profits and overall reputation over time. This again adds value to the adaptation of sustainable practices, as customer loyalty in itself is valuable for the company.

Companies can improve their brand image by embedding sustainability into their company profile. By doing this, companies can attract customers who value ethical and responsible consumption. That being said, they must make a significant commitment to sustainability, focusing not on short-term improvement of their sustainable products, but by committing to long-term sustainability goals.

## 5.6. How do sustainable production methods impact the perceived value of seafood products for consumers?

Lastly, given all relevant findings of this chapter, we will answer our main thesis question: *“How do sustainable production methods impact the perceived value of seafood products for consumers?”*.

Through our analysis of the different sustainability implementations for companies, we have concluded that these efforts can create value not only for the consumers but also for the companies themselves.

As for the consumer, sustainable production methods are becoming increasingly more prevalent in the market, along with an increase in demand for said products. This comes in the form of eco-labels, available information about products and the overall transparency and image of the companies that provide them. We have determined that all of these factors, in some way or another, improve the product value for consumers.

We have also determined that companies can play a significant role in providing additional value to products for consumers through their sustainability efforts. This, however, is limited by the willingness of the company to adapt to sustainable practices and their implementation of sustainability goals.

To summarise, we have found that sustainable production methods do impact the perceived value of seafood products for consumers. Based on our findings and analysis, we believe that sustainable production methods can play a significant role in increasing product value for consumers. However, we have also concluded that there is a disproportionate amount of engagement from providers to meet this demand from the consumers. We believe that these methods only go as far as the providers will allow them and that proper implementation of sustainable production methods will determine the additional value they can provide consumers with. As of today, these methods lack the broader application of the sector to fully realise the potential of sustainable production methods.

## 5.7. Validity of the Study

As with any academic study, it is important to reflect upon the validity of the study itself to highlight the strengths and weaknesses and discuss what could have been done differently. We recognize that our methods of data collection and analysis may be of varying degrees of validity, which we will discuss in this section.

We believe that our method for data collection (conducting in-depth interviews) suits the profile of our topics of research well. We chose this method due to the subjective nature and vagueness of the terms we wanted to analyse. We applied the strengths of qualitative research to collect data suitably. Still, our method may have been affected by our participant selection, personal biases or the questions in our interviews. As these factors significantly influence qualitative data, it is important to show extra caution both when conducting the interviews and when analysing the results.

Our analysis of this data has been supplemented by secondary data in the form of theoretical frameworks and related literature. We believe that by using methodical triangulation, we have strengthened the overall validity of this study and its findings. Despite this, our analysis only uses a few points of secondary data on related topics, which may have affected the results. This could potentially limit the result and impact of our findings in this study. This could have been reduced by using several more sources, from a wider range of topics within the field of consumer behaviour.

Despite our use of methodical triangulation to further the validity of our findings, we will still show reluctance to state any major definitive answers to our research questions. The reason for this is that this study does not provide a solid foundation for a broader application of the findings to the general population. As our research is only based on five in-depth interviews with Norwegian consumers, we believe it is important to highlight that this largely limits the application of our findings.

Due to this, we believe that we can determine the most important factors that influence perceived customer value, but not which ones play the most significant role. This is because our research method limits our ability to determine which factors have the greatest impact, which would likely require a quantitative approach. Optimally, we would have conducted interviews with more subjects, and subjects from different areas, but this is again limited by the scope and resources available for this thesis.

## Limitations and Implications

The main limitation of this study is that the study consists of five in-depth interviews with Norwegian consumers. As this method is suited for in-depth analysis of certain topics, it lacks the amount of data gathered by quantitative methods that would be necessary for generalisation. In this study, we have limited these shortcomings by supplementing our findings with secondary data. Despite this, it is important to approach the findings cautiously to not over-generalize any findings, as our findings likely won't be applicable to all consumer segments.

As for our recommendations, we believe that we have created a set of generally valid recommendations for companies that wish to further their sustainability efforts. This includes the adaptation of sustainable practices, an increased availability of information and building a solid brand image. These recommendations are broad in nature, to serve more as a general overview of potential adaptations for these companies, instead of clearly defined paths for sustainability recommendations. This has again been done to create recommendations for companies without tying them strictly to the findings of this study, which may be of limited applicability to other segments.

## 5.8. Conclusion

In this chapter, we have analysed our findings in light of the secondary sources and materials and highlighted the main strengths and weaknesses of our analysis. We have also answered both our primary and secondary research questions and finally concluded with the validity and implications of this study. This chapter contains the conclusion for our research questions, along with our recommendations and the following implications for these.

## 6. Concluding Remarks

In this study, we have explored the relationship between sustainable seafood production and consumer perception. We have also highlighted several key terms and definitions related to these topics, as to structure our findings. In addition to this, we have analysed the key factors that influence consumer perception, choice and preferences, in light of how sustainability measures impact these.

Through our data collection methods and subsequent analysis, we have found that sustainable production methods significantly impact the consumer decision-making process, along with the consumers' choices. We have also determined several key factors that influence this process, along with recommendations for companies wishing to improve their sustainability efforts.

Our findings are limited by the scope and resources of this thesis. When evaluating our findings, we have taken extra care to limit the generalisations implied by our findings, due to the overall validity of this study. We have also analysed and discussed the overall validity of this study, along with its strengths, weaknesses, applicability and implications.

Finally, we believe that this study addresses a research gap in the current field of consumer behaviour research. As the demand and need for information regarding sustainability as a factor for consumer behaviour increases, we hope that this area of research will see an increase in available theories, ideas and information. We believe that this study will contribute to the field of consumer behaviour research, and provide valuable insights for researchers, companies and consumers alike.

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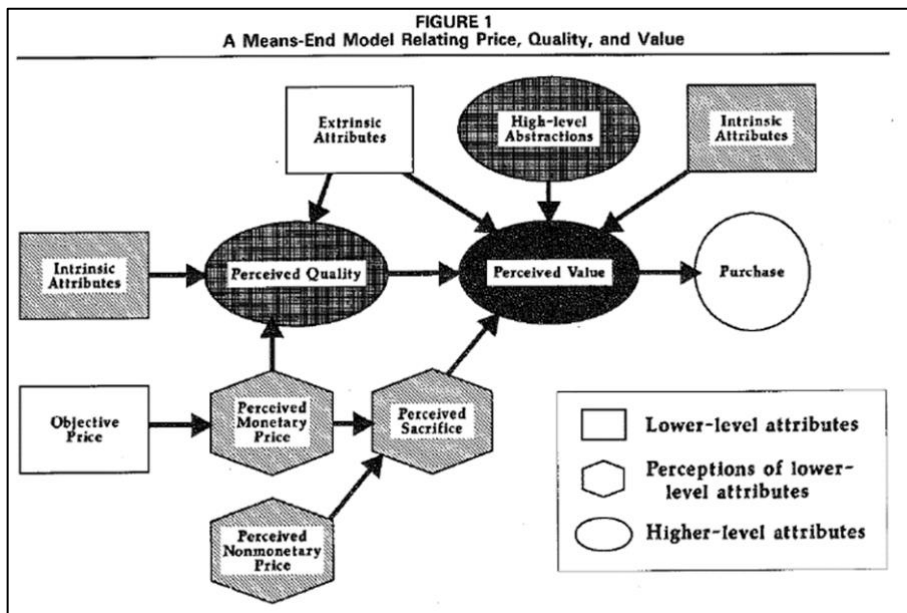
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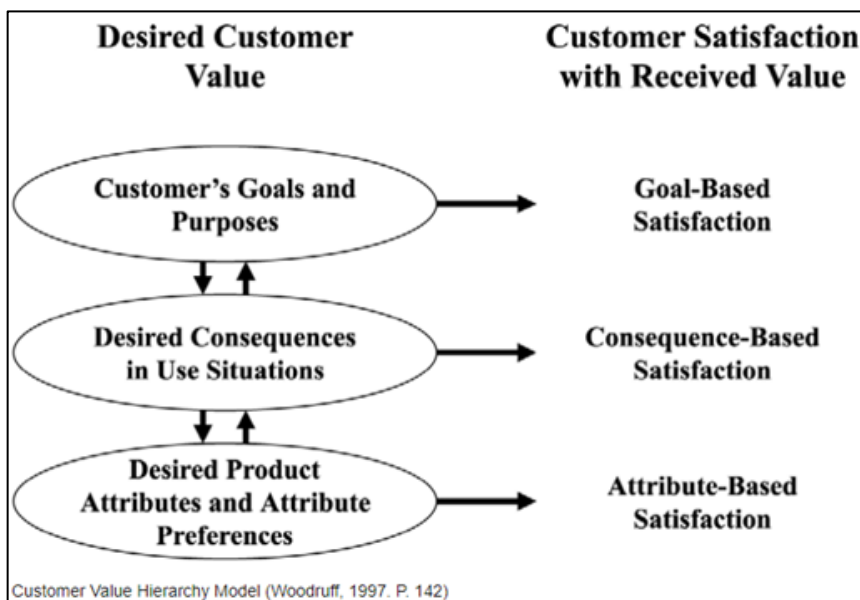
# Appendix

**Appendix 1:** A Means-End Model Relating Price, Quality and Value



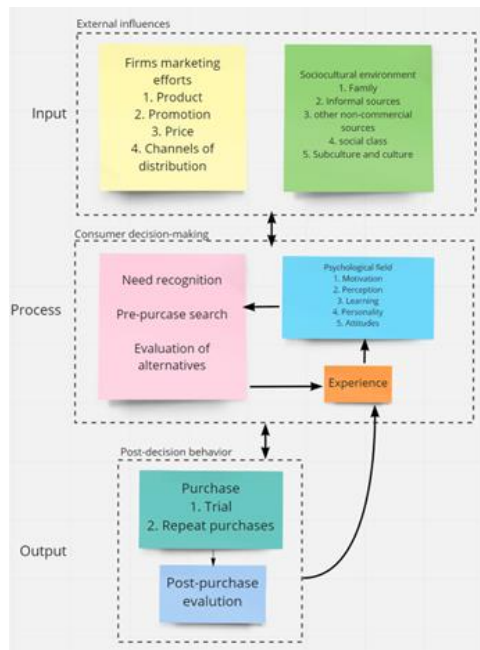
(Zeithaml, 1988).

**Appendix 2:** Woodruff's Customer Value Hierarchy, developed in 1997



(Phillips, 2012)

### Appendix 3: Decision-making model as described by Schiffman, Kanuk and Hansen.



(Schiffman & Kanuk, 2011, p. 69).

### Appendix 4: Interview Guide

#### Introduction:

Welcome and thank you for participating in this interview. The purpose of this discussion is to understand consumer perspectives on sustainable seafood production and its impact on consumer behaviour and perception. Your insights will help us gain valuable information about how sustainable practices influence seafood choices and perceived value.

Before we begin, it's important to highlight the ethical considerations and guidelines for this interview. Your participation is entirely voluntary, and you have the right to skip any questions or withdraw from the interview at any time without providing a reason. Additionally, please note the following:

**Confidentiality:** Your responses will remain strictly confidential. No personal information or identifiers will be shared outside of the research team. All data collected will be used solely for this study.

**Anonymity:** Your name and any identifying information will not be linked to your responses. Your anonymity is guaranteed throughout the research process. You will however be identified by your gender and age as we view this as relevant to the answers we might acquire.

**Informed Consent:** By participating in this interview, you are providing informed consent for your responses to be used for research purposes. If you have any questions about the study or your participation, feel free to ask at any time.

**Skipping Questions:** If any question makes you uncomfortable or you prefer not to answer, please feel free to let us know, and we will proceed to the next question or topic.

**Participant Information:**

Gender:

Age:

Occupation:

**Interview**

**Questions:**

**Seafood habits:**

How often do you buy seafood / how many times per week do you eat seafood? (regular consumer, occasional consumer, etc.)

**Understanding of Sustainable Seafood:**

How would you define the term "sustainable seafood"?

How familiar are you with sustainable fishing or aquaculture practices?

If familiar: where have you found this information?

**Impact on Perceived Value:**

In your opinion, how do sustainable production methods impact the perceived value of seafood products?

Would you be willing to pay a premium for seafood products that are sustainably produced? Why or why not?

**Consumer Awareness:**

Would you consider yourself an environmentally aware person?

To what extent do you believe consumers are aware of what sustainably produced seafood entails?

What sources or channels do you trust to learn about the sustainability of seafood products?

How do you think consumer choices impact the environment?

**Factors Influencing Consumer Choices:**

How do you value price in comparison to quality when purchasing food?

What factors influence your decision when choosing seafood products?

How important is sustainability as a factor in your seafood purchasing decisions?

**Comparison with Non-sustainable Alternatives:**

How does your perception of sustainably produced seafood differ from non-sustainable alternatives?

Have you ever consciously avoided purchasing certain seafood products due to sustainability concerns?

**Key Influences and Preferences:**

What specific aspects of sustainable seafood production are most important to you (eco-certifications, fishing methods, traceability, brands)?

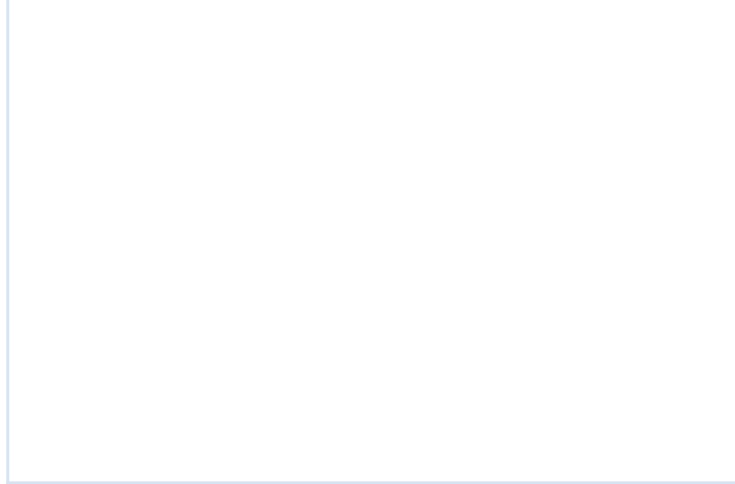
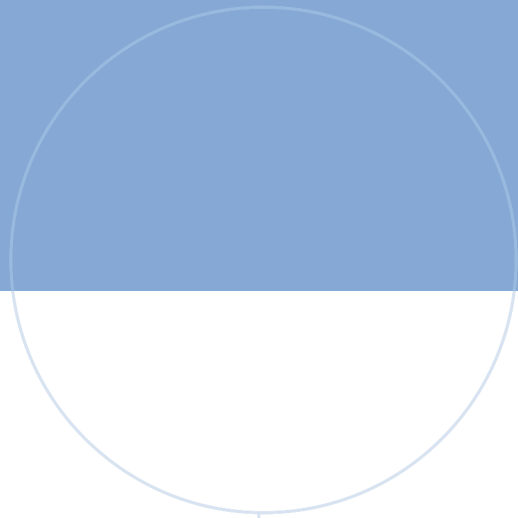
How do you feel that sustainable seafood tastes as compared to non-sustainable seafood?

When comparing sustainable and non-sustainable seafood, what do you think about nutrition?

**Closing:**

Is there anything else you would like to share about your experiences or thoughts regarding sustainable seafood?

Thank you for your participation and insights. Your feedback is greatly appreciated.



 **NTNU**

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