MASTER'S THESIS

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THE IMPACTS OF FISHING TOURISM MANAGEMENT IN NORWAY: A CASE STUDY OF SVOLVAER, LOFOTEN ISLAND.

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ABSTRACT

This thesis explores the impacts of fishing tourism management in Norway with a focus on Svolvaer in the Lofoten community. Lofoten has been a strong and attractive destination spot for tourists including fishing tourists. Because of its nature, scenery, and marine environment. The focus is to describe these impacts from the current regulations and possible challenges, examine sustainability in fishing tourism and the influence of fishing tourism in the community, people, and place. Field survey and interview guides were used to gather information and opinions from the tour guides, local people, and the international fishing tourists. The nationality of the international fishing tourists is Finland (67%), Switzerland (20%) and Netherlands (13%). The study reveals that fishing tourism is a key source of revenue for business owners directly and indirectly. The influx of fishing tourists to the study area has increased income, sales, and boosted businesses in the area. The findings also reveal that the 18kg export limit has no negative impacts on the international fishing tourists. It is noted that the 18kg export quota is one of the ways to ensure sustainability in fishing tourism. The study shows that Norway is regarded as a top favorite fishing destination spot among international tourists because of the thrilling experience and its attractive nature and scenery. The findings reveal older adults from the study with age groups 40-50 (33.3%) and 50 and above (33.3%) with university education are aware and take responsibility to protect the marine environment by not leaving litter behind than the younger adults. Regardless, so far, awareness and responsibility to protect the marine environment from litter are being followed by the international fishing tourists. The study also revealed that safety, recommendation, and price respectively are the top three things' tourists check for before embarking on a travel destination spot. Organized fishing tourism is one of the ways to promote sustainability in fishing tourism. The study reveals a challenge of freezing and filleting by private fishing tourists taking too many fish from the sea, suggestions are control measures and government regulation to mitigate future conflict between the professional local fishermen and the fishing tour operators. The study also revealed that fishing tourism practices in Norway relate to the UN Sustainable Development goal 8,11,12, and 14.

INDEX

Acknowledgement	i
Abstract	ii
Table of Content	iii
List of Figures and Tables	iv
1.0 Introduction	1
2.0 Theoretical Framework	
2.1 Introduction to Fishing Tourism	3
2.2 Fishing Tourism in Norway	4
2.2.1 The fish Tourists	6
2.3 Regulations of Fish Tourism in Norway	8
2.4 What is Sustainability	10
2.4.1 Introduction to some of the sustainable development goals that can be related to fi	sh
tourism	12
2.4.2 Sustainability in Fish Tourism	14
3.0 Methodology	16
3.1 Research Design	
3.2 Methods	17
3.3 Research Analysis	20
4.0 Results and Analysis	21
4.1 Results from structured interview with tour guide on the Regulations of fishing touris	m21
4.2 Results from structured interview with tour guide on the Sustainability in fishing tour	ism21
4.3 Results from structured interview with the tour guide on the Influence of fishing tour	ism in
the community, people and place	22
4.4 Analysis of the local response using Likert scale	23
4.5 Analysis of the International Fishing Tourist's response using Likert scale	28
5.0 Discussion	31
5.1 Regulation of Fishing Tourism in Norway	31
5.2 Sustainability in Fishing Tourism	32
5.3 Influence of Fishing Tourism in the Community, People and Place	34
6.0 Conclusion and Recommendation	35
References	
Appendix one: Interview guide	
Appendix two: Questionnaire one (Local people)	
Appendix three: Questionnaire two (International Tourists perception)	
Appendix four: Informational Letter	

List of Figures and Tables

- Figure 1: Me as a crew on the heritage fishing boat MS Symra
- Figure 2: Three pillars of Sustainability
- Figure 3: Decent work and economic growth
- Figure 4: Sustainable cities and communities
- Figure 5: Responsible consumption and production
- Figure 6: Life below water
- Figure 7: Map of Northern Norway showing Lofoten Islands
- Figure 8: Likert scale interpretation
- Figure 9: Pie chart showing the Nationality of the International Fishing Tourists
- Table 1: Shows the number and percentage of employees in the Marine Fishing Tourism in different regions in Norway by Industry
- Table 2: Minimum sizes for fish species that are to be reported to the Norwegian directory of fisheries by Norwegian fish camps.
- Table 3: Statement on the interview guide in three component areas (regulations of fishing tourism, sustainability in fishing tourism and the influence of fishing tourism in the community, people, and place).
- Table 4: The demographic profile of the local respondents in the study area.
- Table 5: Shows the local people response to the question: Has fishing tourism helped to reduce unemployment rate in the community?
- Table 6: Shows the local people response to the question: Does your community have more fish for tourists to catch, export and consume?
- Table 7: Shows the local people response to the question: Does the Norwegian fishing regulations related to the amount of 18 kilos allowed to be brought out of the country affect tourists' activities positively?
- Table 8: Shows the local people response to the question: Does fishing regulations affect tourists' negatively?
- Table 9: Shows the local people response to the question: Are the road networks satisfactory for the tourists' activity in your area?
- Table 10: Shows the local people response to the question: Does fishing tourism activities help to boost your business, sales, and income?
- Table 11: Shows the local people response to the question: What is your opinion on fishing tourists' general behaviour regarding the marine environment (leaving litter behind, fishing more than needed, throwing small fish away)? Positive or Negative view?
- Table 12: The Demographic profile of the International Fishing Tourists that visited the study area.
- Table 13: Shows the fish tourists opinion to the question: Do you find Norwegian nature more attractive for fishing activities compared to other countries you have visited?
- Table 14: Shows the fish tourists opinion to the question: Would you recommend Norway as a good destination for a fishing trip?
- Table 15: Shows the number of times the fishing tourists interviewed had visited Norway.
- Table 16: Shows the important things the fishing tourists listed as their personal check before going for a fishing trip in a country/community.
- Table 17: Do you find the Norwegian Fishing regulations allowing a maximum of 18kilos of fish to be brought out of the country negative for your fishing experience?

Table 18: Shows the fish tourists opinion to the question: Do you find the Norwegian fishing regulations that you are have to be registered at a fishing camp to be allowed to bring fish out of the country negative for your fishing experience?

CHAPTER ONE

1.0 INTRODUCTION

Fishing tourism can be defined as a set of specialized activities that involves boarding non-crew members on fishing vessels to promote and valorise their profession and sociocultural heritage, differentiate their incomes, and enhance a sustainable use of marine ecosystems (Okech, 2015). Fishing Tourism is described as taking part in a trip, charter, experience, or activity that entails catching a legal species. It involves using a rod and reel or other fishing gear and takes place in saltwater environments and could involve charter boat or land-based fishing (SATC, 2019).

According to the UN World Tourism Organization (UNWTO), tourism can support all of the Sustainable Development Goals (SDGs), either directly or indirectly. More specifically, the SDGs 8,11,12 and 14 are among the ones that might be connected to fishing tourism. Fishing-related tourism has the potential to be a major driver of several UN SDGs and may contribute to a more sustainable future by promoting sustainable tourism development at the local level, empowering underrepresented groups, encouraging entrepreneurship and small-scale businesses, and protecting marine resources.

Norway's economy has been significantly impacted by fishing tourism. In 2008, it was estimated that the research part of the Norwegian Marine fishing tourism industry had a total annual turnover of NOK 842.3 million (Borch, 2011).

Norway's large coastline and easy access to recreational fishing make it possible for visitors to take part in the activity, which is a fast-expanding industry in the nation (Borch, 2011). According to research by the Norut Northern Research Institute, professional fishing tourism establishments in Norway provide a host, boats, lodging, and facilities for managing catch. A total of 14,968 beds and 2,369 boats are offered by these 434 establishments, according to the report. These businesses hosted 1,257,577 tourist nights in total, of which 46.5% were related to fishing tourists (Borch, 2011).

Fishing tourism has a strong influence on the local communities in Lofoten Island, Norway. Fishing activities have played an important economic and cultural role across the Lofoten archipelago for hundreds of years because fishing has been ingrained in the island's culture and lifestyle (Roste, 2023). Visitors can tour the several fishing communities in Lofoten and stay in a traditional fisherman's cabin to get a sense of what it was like for early anglers to fish there (Roste, 2023). The Lofoten archipelago has rich traditional fisheries and a plethora of species. Because locals are cordial with fishermen, this allows for unification into their community and culture. The Lofoten Islands in Norway are a fishing enthusiast's paradise! Surrounded by stunning Arctic scenery, the islands offer world-class catch and an unforgettable experience. Cod, halibut, and coalfish are found in fjords and deep oceans, attracting fishing tourists from all over the world. Every angler's needs are met by guided tours designed by knowledgeable guides. The Lofoten Islands are a great choice due to their distinctive topography, climate, and marine life. These picturesque islands have some of the largest concentrations of Atlantic cod in the world (Carroll, 2023).

In addition, tourists can make use of various fishing techniques such as longlines, hand lines, netting, and baited traps (Carroll, 2023). Many companies offer planned fishing excursions, also tourists can rent a boat from boat owners that have a boatman's license and go fishing for fun on their own. Although it is recommended to go with tour guides because they know exactly where the fish are, and the regulations of fishing tourism activities in the country.

The aim of the thesis: This thesis will explore the impacts of fishing tourism regulations in Norway,

the sustainable development goals 8, 11, 12 and 14 in relation with fishing tourism activities and the
influence of fishing tourism in the community, place and people.

CHAPTER TWO

2.0 THEORETICAL FRAMEWORK 2.1 INTRODUCTION TO FISH TOURISM:

In recent years, coastal regions with a long history of fishing have worked to develop a brand-new form of tourism known as marine or fishing tourism. Although there are numerous clarifications for this activity in the various Fishing Regulations, the notion has not yet received a universal definition.

Bauer and Herr (2004) emphasized that the idea of fishing tourism encompasses several aspects of travel, including the journey between locations, the services received, the overnight stay, leisure time, and entertainment. According to a different idea, fishing-based tourism is defined as a vacation where a person travels from his home to a different location and spends the night to engage in fishing activities and utilize tourist services (Tsafoutis et al; 2021). In Tsafoutis et al, (2021) article, it states that, those descriptions were too vague and insisted that visitors must be treated differently based on their unique expectations and levels of interest in their fishing trips. Because of this, the two mobility groups—the specific and the general—were described by two teams. The rewards for fishing expeditions are different based on the two definitions, thus they shouldn't be compared. In the article by Tsafoutis et al, (2021) the definitions are countered by pointing out that tourists have different perspectives. They claimed that tourists that go fishing also use the same resources as other tourists do. Because the goal of the trip has no bearing on the activity, there should simply be a definition of fishing tourism.

According to a review for the European Parliament by Hyder et al. (2017), marine recreational fishing in Europe had a total economic impact of 10.5 billion euros, made up of 5.1 (direct), 2.3 (indirect), and 3.2 (induced) billion euros in spending. This activity provided 100,000 jobs, with 57,000, 18,000, and 24,000 jobs resulting from direct, indirect, and induced expenditure, respectively. European maritime recreational fishing spending and participation rates are lower than those of Oceania and the United States, with lower spending than that of the United States, but higher than those of South America and Africa (Hyder et al., 2018). The proportion of overall catch that was attributed to recreational fishing in Europe was estimated to range from 2 to 72%. Leisure catches of sea bass, salmon, and pollock were projected to account for 30-40% of the total stock catch, cod and mackerel for less than 21%, and eel for between 13-72% of landings (Hyder et al., 2017)." For the economic growth and decent work so far, applying fishing tourism in the sustainable development goal 8 in the study of this research, Norway has one of the highest rates of participation in recreational sea fishing in Europe, but the European recreational sea fisher's expenditure was accounting for an estimated €5.9 billion in yearly spending (Hyder et al., 2018). According to Herfaut et al. (2013), nearly 2.5 million leisure fishers in France spend between 1200 and 2000 million euros annually. Recreational and tourist fisheries may be a catalyst for boosting economies.

Fishing tourism is one of the options fishermen are looking to diversify their income and improve their livelihood. Through that, the fishing tourism market has significantly increased across the globe which has led to a path of growth. So far, there is a positive outlook for the forecast period of the fishing tourism market.

The trend for environmental friendliness and the demand for tourists to spend leisure time

in nature has created a pathway to growth for the fishing tourism market. Fishing tourism offers these tourists a fun tour where they can be closer to serene rivers or seas and apparently learn some new skills. The need for tourists to be closer to nature has brought positive benefits to the market while effortlessly giving the firms a major selling point for their tour packages.

There is a good opportunity for coastal communities to earn extra income through fishing tourism in diverse ways like tours, accommodations, travel, and food. Local jobs, the growth of fisheries goods, and extra money for traditional fishermen are all benefits of fishing tourism. In many instances, artisanal fishing techniques offer superior management and conservation measures for marine resources and fisheries and do not permanently harm the aquatic habitat (Okech 2015).

2.2 FISHING TOURISM IN NORWAY:

Fishing is an important principal pillar to the Norwegian economy, so fishing tourism plays a vital role in the sustainability of their coastal communities through active and fair regulated fishing activities.

Norwegian nature is endowed. The scenery, view of the seas and other water bodies, mountain stands on the shores of deep fjords, makes Norway a paradise for tourists who are nature-admirers. Fishing has remained one of the most fundamental economic activities for the Norwegians since prehistoric times.

About fish tourism: Marine angling tourism, a well-liked type of consuming wildlife tourism in the Arctic fjords, is hosted by remote coastal towns in Norway. Among the relatively few types of tourism where travelers pay a considerable amount to go to far coastal locations and voluntarily stay at these locations for the length of their vacation is marine angling tourism.

Fish as a common resource: As part of a long-standing marine fishing culture, these little towns have depended on the fish in the fjords for many centuries, Because the fish are defined as a common pool resource in Norway, this creates important governance issues (Solstrand, 2013). Tourism-related conflicts may arise because of tourists fishing from the same natural resource pool as local community members (Arlinghaus 2005; Yang et al. 2013; Butler 1974). When visitors disobey the laws of the host nation's attempt to regulate consumption, conflicts are intensified. Fishing tourism is an eye opener for Government and research institutions to investigate to properly identify regulations and methods to be adopted by fishermen and tourists without causing harm to the ocean including fish stocks and ocean's ecosystem.

Borch et al; (2011), stated that Tourism related to marine fisheries is growing quickly in Norway. It is difficult to recognize tourists and businesses for survey purposes because of Norway's extensive coastline, relatively open access to seawater recreational fishing, and the absence of a license system and a registry of fishing tourism companies.

Borch et al; (2011) also stressed on the economic impacts of fishing tourism by regions in Norway from the aspects of tourists 'expenditure and employment. The totality of tourism's direct, indirect, and induced effects within an area determines its overall regional impact on

the economy. Due to differences in industrial size and structure, each area has a distinct production rate. This suggests that regional differences will exist in the secondary effects of fishing tourist spending. However, for other industries (with externally driven production), the impact is zero, meaning that changes in the regional tourist demand have no effect on production in these industries. Some industries receive only secondary effects and no direct impacts from fishing tourism. Given that these sectors are politically governed, it is believed that output in them is unrelated to changes in regional demand for fishing and tourism.

Table 1 Shows the number and percentage of employees in the Marine Fishing Tourism in different Regions in Norway by Industry. Source: Extracted from Trude Borch, Mikko Moilanen & Frank Olsen (2011)

Wollanell & Frank O	North Norway		Mid Norway		West Norway		South Norway	
	Direct and Secon- dary employ- ment effects	Share of total emploment in the industry	Direct and Secon- dary employ- ment effects	Share of total employment in the industry	Direct and Secon- dary employ- ment effects	Share of total employment in the industry	Direct and Secon- dary employ- ment effects	Share of total employ- ment in the industry
Fish processing and food industry	9	0.1%	5	0.1%	7	0.0%	1	0.1%
Manufacturing	14	0.1%	7	0.0%	8	0.0%	3	0.0%
Construction	30	0.2%	12	0.1%	16	0.0%	2	0.0%
Retail	159	0.5%	49	0.2%	62	0.1%	15	0.1%
Hotel and Restaurant	656	8.7%	244	3.4%	257	1.3%	54	1.2%
Transport	16	0.1%	6	0.1%	6	0.0%	3	0.0%
Post and telecommunicati ons	8	0.3%	3	0.1%	3	0.0%	1	0.1%
Commercial services and financing	53	0.3%	28	0.1%	25	0.0%	8	0.1%
Personal Services	54	0.4%	18	0.1%	30	0.0%	7	0.1%
Total	999	0.4%	372	0.2%	414	0.1%	94	0.1%

Table 1 clearly shows that with direct and secondary effects, marine fishing tourism expenditure creates nearly 999 employments in Northern Norway, 372 employments in Mid Norway, 414 employments in West Norway and 94 in South Norway. The industry of lodging and dining generates about two thirds of these jobs. The overall employment effect is highest in North Norway, where marine fishing tourism expenditure accounts for 0.4% of jobs there, relative to the size of the employment base. West and South Norway have the lowest shares. The reality that marine fishing tourism accounts for nearly 9% of North Norway's employment in the hotel and restaurant industry illustrates the industry's large regional significance. With a share that is more than 2.5 times higher than that of the second-ranked area, Mid Norway, this is by far the highest share amongst regions. According to Borch et al., (2011) their research on coastal fishing tourism sheds new light on the industry's structure in Norway and its effects on local economies. This information is crucial to inform future legislative decision-making because marine fishing tourism is an industry that competes with other sectors of the fisheries.

2.2.1 THE FISH TOURISTS:

FISH TOURISTS COMING TO NORWAY:

Research by Borch et al. (2011) found that 85% of fishing tourists coming to the country Norway travel by their own vehicle, 7% do so in conjunction with a rental car, and 8% do so in conjunction with a transportation service provided by the fishing tourism organization. But the case for the same fishing tourists coming to Northern Norway is quite different, especially for tourists coming from the mid and southern Europe, makes it more practical to travel by plane. It was also stated that tourists that travel by plane spend more money than other tourists that travel by car. And it states that fishing tourists that travel by plane spend fewer days (average of 7.7 nights) than tourists that travel by car (average of 9.5 nights). According to Borch et al, (2011) the percentage of foreign nationals visiting Norway in the year 2008 for fishing tourism activities, was stated that 59% of the tourists came from Germany, 11% from Sweden, 8% are Norwegian citizens, 5% from Czech Republic, 4% from Netherland, 3% from Austria, 2% from Poland and 1% each from England, Russia, Denmark, Finland and other countries amounts 6%.

According to Innovation Norway (2020), also pointed out that it's also essential to note that Norway, because of its proximity and exceptional "big catch" conditions, provides a significant benefit to German travelers. Norway has an edge because it can provide both very experienced and less experienced target groups with a thrilling and adventurous experience on the sea. The few or extremely costly options for flying with fishing equipment can be very challenging for several tour companies and tourists.

The diversity of fish species, potential for large catches, and ease of access to breathtaking, "untouched" natural scenery, along with the opportunity to realize dreams of large catches and top-notch sea fishing adventures, are Norway's main selling points as an end location for sea fishing.

Additionally, Norway can provide enjoyable sea fishing opportunities in the winter, which is a good time for tourist locations in Norway to see an increase in visitors.

Brenner (2014) carried out a study on marine fishing tourists in Westfjords of Iceland and asked sea anglers what countries they have mostly visited during their holidays, Brenner

discovered that these sea anglers have visited 36 different countries on 6 continents. The result showed that most sea anglers preferred Norway (82%) followed by Denmark (27%) and Ireland (20%).

This shows that there is a higher demand and attraction of fishing tourism and its various activities in Norway than any other country.



Fig 1- Me as crew on the heritage fishing boat MS Symra. Photo credit- by one of the crew members.

2.3 REGULATIONS OF FISH TOURISM IN NORWAY:

Foreign visitors/tourists who fish in the sea in Norway must abide by new regulations set by the Norwegian Directorate of Fisheries.

The following are rules for **SEA FISHING** for tourists in Norway:

- (i) keeping at least 100 meters away from fish farms.
- (ii) only use handheld tackle
- (iii) it is not permitted to capture fish shorter than the regulated minimum length.
- (iv) Selling your capture is against the law
- (v) Avoid fishing for protected species:

Protected all year: Blue ling (Molva dypterygia), Lobster (Homarus gammarus), Bluefin tuna (Thunnus thynnus), Silk Shark (Carcharhinus falciformis), Eel (Anguilla anguilla), Wrasse (Labridae), Basking Shark (Cetorhinus maximus), Porbeagle (Lamna nasus), Spiny Dogfish (Squalus acanthias), and Crustacean (Crustacea).

Protected part of the year: Halibut (genus hippoglossus), redfish (Sebastes sp), lumpfish (Cyclopterus lumpus), and greenland halibut (Reinhardtius hippoglossoides).

- (vi) King crab fishing is not allowed for visitors.
- (vii) Coastal seal hunting is permitted under certain circumstances with a license that has been authorized and when done with a Norwegian citizen.

EXPORT OF FISH: EXPORT QUOTA.

According to the Directorates of Fisheries in Norway, information on export quota for tourists must be abided by.

To export fish from Norway, visitors/tourists must fish with a licensed fishing camp. Two times per calendar year, an export limit of 18 kg of fish or fish products is allowed. In addition to the export limit, trophy fish cannot be exported. Freshwater fish such as Salmon, trout, and char are exempted from the quota.

REQUIREMENTS TO DOCUMENTATION FOR THE EXPORT OF FISH:

When exporting fish, tourist fishers must provide proof that the catch was made under the supervision of a licensed tourist fishing business.

REQUIREMENTS:

According to the Norwegian Directorates of Fisheries (2020), Norwegian Customs will accept a receipt or corresponding proof of the stay issued to a named person in the travel party or by person. This proof must further include:

- (i) the registered tourist fishing enterprise's name, address and business registration number
- (ii) the name of the person or persons that have fished under direction of the enterprise
- (iii) the period of the stay
- (iv) how many persons the stay applies to.

A printout of the catch that each tourist fisher submitted to the company will also be accepted by Norwegian Customs. Such a copy must contain the following information:

- (i) the enterprise's identity
- (ii) the person who has been fishing
- (iii) how much that has been fished

MINIMUM SIZES FOR SALTWATER SPECIES:

Certain species have size restrictions on the fish that can be kept. This guarantees that the fish reach spawning size, protecting the stock's capacity for reproduction. If the fish are less than the minimum size requirement, it is best to release them as gently as possible back into the sea. As per the regulations, one must take great care to remove a fish that is smaller than the required minimum size from the fishing equipment before returning it to the water. If the fish is dead or incapable of surviving, it is advisable to keep it to eat. In this case, one could attempt a different spot for fishing or use larger hooks to avoid catching too many fish that are under the minimum size requirement. (Norwegian Directorates of Fisheries, 2019).

Fish camps must report all tourist fish catches to the Directorate of Fisheries authorities. Table 2 below shows the minimum size for species that are to be reported for north and south of 62 degree N.

Table 2. Minimum sizes for fish species that are to be reported to the Norwegian Directory of Fisheries by Norwegian Fish camps. Source: Norwegian Directorate of Fisheries (2019)

Species	Minimum Size North of 62 degree N	Minimum Size South of 62 degree N
Cod (Gadus morhua)	44 cm	40 cm
Redfish (Sciaenops ocellatus)	32 cm	32 cm
Halibut (Genus Hippoglossus)	80 cm	80 cm
Saithe (Pollachius virens)	No minimum size	No minimum size
Wolffish (Anarhichas lupus)	No minimum size	No minimum size

In a statement made by the Norwegian Directorates of Fisheries in 2017; stated that: "Due to the high demand of fishing tourists in Norway, the coastal fish stocks in Norway are under pressure and there is need to increase efforts and measures to guarantee the next generation to be able to enjoy fishing as a game or sport activities or recreation in Norway. The fish in Norway's water including the sea, rivers and lakes are free for all, but there should be a goal to safeguard fish stocks for the future".

2.4 WHAT IS SUSTAINABILITY:

Sustainability can be defined as "Meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Browne, 2022). Even though you might have heard this before, many people are unaware of the precise roots of this definition. This specific concept of sustainability was included in the Brundtland report, which the United Nations Brundtland Commission produced in 1987 and advocated for a strategy that combined development and the environment.

Alternative definitions have developed throughout time, but the Brundtland report's interpretation from the 1980s is still widely accepted. Brundtland Report: United Nation (1987).

BRIEF HISTORY OF THE CONCEPT OF SUSTAINABILITY:

The word "sustainability" was first used in the context of forestry, where it refers to the principle of never taking more from a forest than it produces in new growth. In German, sustainability is referred to as Nachhaltigkeit, and this usage dates to 1713. It goes without saying that protecting natural resources for future generations has always been a concern. For example, early farmers must have been concerned about keeping soil fertility, and our Paleolithic predecessors surely fretted about the extinction of their prey. Traditional beliefs mandated thinking in terms of stewardship and care for future generations, as exemplified in the oft-quoted words of a Nigerian tribal chief who described the group as consisting of "many dead, few living and countless others unborn" (Kuhlman et al; 2010).

Since resource scarcity is a major worry for economists, sustainability (without necessarily using the word) is a natural area of research for them. A well-known example is the work of Thomas Malthus, who in 1798 presented his idea of impending widespread hunger (caused by the unavailability of available agricultural land to feed a rising population). In 1931, American economist Harold Hotelling developed a theory on the best rate of depletion of non-renewable resources that is still applicable today (Kuhlman et al; 2010).

The Club of Rome study (Meadows, 1972), which asserted that several natural resources vital to our survival would be depleted within one or two generations, was a turning point in bringing these issues to the forefront of international public affairs. Such pessimism is inappropriate for public policy, which should, after all, be focused on making things better. As a result, the Brundtland Report, named after its chairperson and product of the UN World Commission on Environment and Development, was hailed for providing a path to avoid approaching disaster. It was this study that popularized the idea of sustainability and helped it gain the acceptance it does today (Kuhlman et al; 2010). Brundtland and her colleagues asked the following question of themselves: How can the ambitions of the countries of the globe for a better life be restored with finite natural resources and the risks of environmental degradation? According to the Commission, their solution is sustainable development. In other words, "development that satisfies current wants without jeopardizing the capacity of coming generations to meet their own needs" (Kuhlman et al; 2010).

Environmental issues are therefore crucial, but the main case is one of welfare, viewed in the context of intergenerational equality. Not because the environment has intrinsic value, but rather so that we can protect its riches for future generations.

Since then, the idea of sustainability has undergone two significant changes: firstly, it has

been interpreted in terms of three elements that must coexist harmoniously: social, economic, and environmental. Secondly, the distinction between "strong" and "weak" sustainability (Kuhlman et al; 2010)

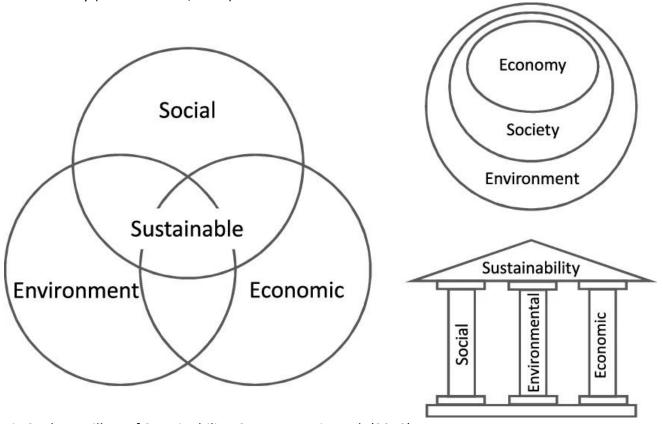


Fig 2: Three pillars of Sustainability. Source: Purvis et al; (2019) In Fig 2 above, the left shows sustainability as three intersecting circles. In the top right, it is a nested approach. In the bottom right there are three pillars. The schematic with nested ellipses emphasizes a hierarchy of the dimensions, putting environment as the foundation for the other two.

Development and the environment are two issues that the Brundtland report suggests should be balanced. They can also be seen as requirements vs resources or as short-term versus long-term considerations.

But what exactly are economic and social growth, and how do they differ from one another? Political scientist Robert Gibson argues that this distinction is necessary because "material gains are not sufficient measures or preservers of human well-being." The same author also recommends that the three "pillars" or "dimensions" reflect the academic fields studied by persons who are interested in sustainability, and for good measure, he adds that a cultural and political pillar might also be added. Gibson himself, however, rejects the concept of pillars entirely and proposes seven principles as a potential foundation for sustainability.

2.4.1 INTRODUCTION TO SOME OF THE SUSTAINABLE GOALS THAT CAN BE RELATED TO FISH TOURISM:

Fish tourism is a promising activity and form of tourism in achieving some of the UN sustainable development goals. Below are the highlights of the goals could be related with this study:

Sustainability Goal 8 (SDG8) Decent work and Economic Growth:

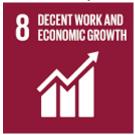


Fig 3- Decent work and Economic Growth

1 in 11 jobs worldwide are presently supported by the tourism industry, which is one of the key factors in the growth of the world economy (Pololikashvili 2023). Society, especially young people, and women can gain from improved skills and professional development by providing access to respectable employment opportunities in the tourism sector. Target 8.9: "By 2030, devise and implement policies to support sustainable tourism that generates jobs and promotes local culture and products," acknowledges the sector's contribution to job creation. Fishing tourism is a type of tourism that contributes to local communities, people, fishermen, and places (Pololikashvili, 2023).

Research findings on the economic effects of marine fishing tourism typically concentrate on the patterns of spending connected to the industry in question. The main techniques include input-output models, multipliers, economic base models, surveys of visitor spending, and analysis of secondary data from official economic figures. In studies of the economic effects of fishing tourism, the money spent fishing by non-resident anglers on boat rental, equipment, gasoline, lodging, transit, and other attractions and services is the main emphasis of visitor spending surveys (Borch et al; 2011).

Diversifying their businesses to appeal to tourists, such as by giving tours on fishing boats, lodging in fishermen's houses, and the chance to eat locally caught fish, can help fishermen and their families supplement their income. This new revenue may lessen the reliance of fishing families on their erratic fishing income. Additionally, acquiring new skills in the tourism industry can assist fishing families get a competitive edge on the job market. The broader economy of the region can benefit from tourism as well by giving locals work possibilities or increased cash. (e.g., in local shops, restaurants or other service-providers). The additional revenue is generated not just by the visitors' direct spending but also by the businesses that provide services to them. Additionally, the local population's purchasing power will be increased. A strong local economy will also increase tax revenue, resulting in additional funding for improved local infrastructure (European Union 2014).

Sustainable Cities and Communities SDG11:

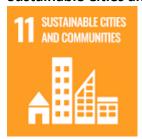


Fig 4- Sustainable cities and communities

Fishing tourism helps to enhance sustainable communities since it attracts tourists all over the world and generates tangible income for the local authorities, fishermen and local indigenes, this helps in motivating the local authorities to develop sustainable infrastructures, create new things for the community to be viable and maintain its attractiveness.

Sustainable Consumption and Production Patterns SDG12:



Fig 5- Responsible consumption and production

It has been proposed that tourism fisheries can increase the value of landed catch, offer local artisanal fishers' alternative employment, and concurrently maintain stocks because recreationally obtained fish are frequently released. However, sustainable local economic benefit is essential for fishing tourism to adhere to ecotourism principles (Butler et al; 2020).

The better way for fishing tourists to avoid taking more fish from the sea for consumption, is when they go fishing with guided tours, the guides teach them about the need not to take too many fish from the sea. Other tourists consume fish from restaurants which is lower than fishing tourists who mostly take at least two big fish from the sea for consumption.

Life Below Water SDG14:



Fig 6- Life below water

Proper management of fishing tourism helps to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. To achieve and maintain productive and healthy marine ecosystems, sustainable fishing is crucial, as it minimizes environmental consequences and minimizes overexploitation (SDG 14).

SDG 14 has been considered as one of the hardest to accomplish. Analysis reveals that SDG 14's targets, especially those pertaining to overfishing, have made little headway. No nation is anywhere close to achieving SDG 14. As a result, "Life below water" continues to be a top priority on the global agenda, with the UN urging urgent, coordinated, international action to advance towards achieving these goals. (Marine Stewardship Council 2023).

The achievement of SDG 14 depends in large part on the global fishing industry. SDGs 14.2, to manage and safeguard marine and coastal ecosystems for healthy and productive seas, and 14.4, to effectively limit harvesting and halt overfishing, are particularly significant (Marine Stewardship Council, 2023).

2.4.2 SUSTAINABILITY IN FISH TOURISM

The 2030 Agenda places a strong emphasis on sustainable tourism. To be successful, this agenda needs a clear execution plan, sufficient funding, and investments in infrastructure, technology, and human capital (UNWTO, 2015).

The sustainable development goal that is mostly important and challenging is goal 14, to conserve and sustainably use the oceans, seas, and marine resources for sustainable development. Fishing tourism is interlinked with the oceans and the marine environment. The environment is crucial whether you're fishing for fun or for food, boating, traveling across the ocean, staying by the coast, or taking a cruise. (all are packages included in the fish tour). As a result, to assist in conserving and preserving delicate ecosystems, tourism development must be included in integrated Coastal Zone Management plans. We all rely on healthy oceans, no matter how far away. According to UNStats, nearly 37% of the world's population (2010) mainly depends on marine and coastal biodiversity for their livelihoods (UN, 2021).

In places where tourism, environment, and people coexist, the sovereignty of local communities and Indigenous Peoples over their natural seascapes needs to be codified through co-created conservation plans. Therefore, businesses must collaborate with the local communities that are most immediately impacted by coastal developments and

tourism-related activities. The principles of resilient and sustainable development will need to be integrated throughout the entire lifecycle of developing infrastructure. This perspective also places a significant emphasis on better methods for managing tourism, including increasing traveler capabilities, education, and inclusivity, as well as that of the private sector and local communities (Tippett, 2022).

Fishing tourism may well have a beneficial impact and help to realize SDG 11 Sustainable cities and Communities. Fishing tourism-related income and the desire to draw more visitors may prompt local governments to spend on urban infrastructure, such as sustainable transportation and accessible public spaces, which will benefit both visitors and locals.

It might help to advance environmentally friendly urban planning, municipal conservation, and the preservation of regional history. Once they meet both local and tourist demand, investments in entertainment, recreation, and leisure facilities may become financially feasible. If fishing tourism helps to stimulate social and cultural capital, it might help communities become more resilient (Kamp, 2020).

Cities have supported the growth of tourism in a variety of methods. Residents of urban areas might seek recreation in natural settings because of their living circumstances. The high concentration of architectural and cultural attractions, historical sites and museums, cultural and sporting events, entertainment and shopping venues, and events like festivals, concerts, and sporting competitions make many cities appealing tourist destinations in and of themselves (Kamp, 2020).

Cities also act as important transportation centres and entry points to other places. Through fishing tourism, an influx of tourists will motivate authorities to develop transportation and road systems in cities to create accessibility to local communities where coastal tourism including fishing tours and activities are practiced.

It requires investments at the federal, state - wide, and municipal level to provide the necessary infrastructure, including better internet connectivity, new and improved roads that will ensure easy access to isolated fishing villages, and updated maritime and fishing facilities, all while ensuring that they are done in a sustainable and environmentally friendly manner.

CHAPTER THREE

3.0 METHODOLOGY

This describes the method used in this research thesis. The research work is based on an interview guide and field survey.

A research methodology is a means to describe how a researcher plans to conduct their investigation. It is a logical, methodical approach to a study issue. A methodology explains how a researcher will conduct the study to produce accurate, valid findings that meet their goals and objectives. It includes the data they will gather, where they will get it, how they will gather it, and how they will evaluate it (Indeed Editorial Team. 2021).

This research work is exploratory, hence the use of qualitative methods, because it deals with people's perceptions of fishing tourism and its impacts positively and negatively.

Based on the research questions, grounded theory is selected as the method. Below are the research questions:

In this thesis, i will explore:

- (a) The impacts (positive and negative) of fishing tourism regulation in Norway
- (b) Sustainability in fishing tourism in relation with UN sustainable development goals
- (c) Influence of fishing tourism on the local communities, places and people.

3.1 RESEARCH DESIGN:

The research design is based on a interview and survey(questionnaire): Structured interviewe: Two companies were interviewed, the interviewees (two persons working as a tour guide, each person representing their company from two different companies) the tour guides in each of the companies, mostly take fishing tourists on a trip to deep sea fishing.

<u>Field Survey 1:</u> Paper-based questionnaires were distributed to fifteen local people who are hotel employees and owners of fish restaurants in the community. The selected local people interviewed were selected for the study because they directly and indirectly gain from fishing tourists' participation in their community, they have second-hand contact with tourists after the guided tours, and they have proper knowledge of how fishing tourists behave in their community, their impacts and perception.

<u>Field Survey 2</u>: Paper-based questionnaires were distributed to fifteen fishing tourists who joined a fishing trip with one of the tour companies.

3.2 METHODS:

The methods used in this research work are Interview and Survey. And other educational materials related to the research topic.

Structured interview.: I booked an appointment through phone calls with two fishing tour companies for a research interview with their tour guide or tour owner, whichever would be available. I found these companies on the internet and got their phone contact from their websites. It happens that both tour companies granted me the permission to interview their tour guides. Before that, I have made a request that they read and confirm their participation with a signature on the Information Letter of Consent from the Norwegian Agency for Shared Services in Education and Research. (a copy is attached on this thesis as appendix 4 in page 46) before the interview would take place. This is a mandatory task to do in Norway when one wants to conduct a research interview involving voice recordings. The interview was done one-on-one, physically. I did an interview with the tour guide that led the trip on 21st July 2023 from 13:30 and 14:10 including voice recording and taking notes. The second interview with the other tour guide from another tour company was on 22nd July 2023. The interview lasted for about 30 minutes including voice recordings and taking notes. The details of the interview guide are subdivided into three parts. See Table 3

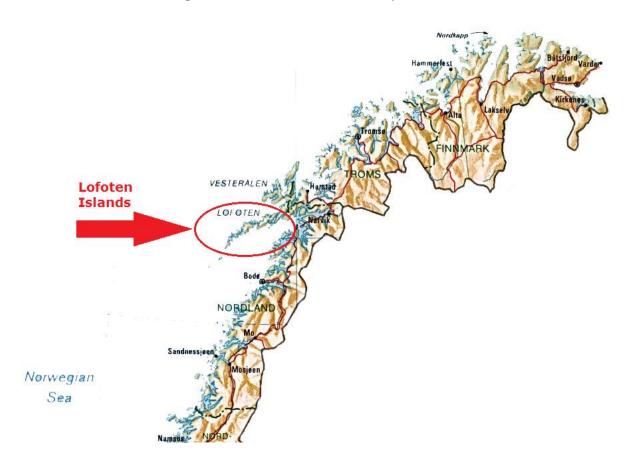


Fig 7: Map of Northern Norway showing Lofoten Island. Source: Google image

Table 3 below shows the statement on the interview guide in three component areas (regulations of fishing tourism, sustainability in fishing tourism and the influence of fishing Tourism in the community, place and people).

 → Does the limit of 18 kilos of fish products that can be exported out of Norway affect international tourists" desire in fishing for fun? → Is the current Norwegian fish regulations for international fish tourists a disadvantage for your future practice within the fishing tour business? → Challenges of the regulations to international fish tourists → Do the current regulations impact tourists visiting your community? 	➤ REGULATIONS OF FISHING TOURISM
 What does the term sustainability mean to you? How can your community facilitate sustainable fishing tourism? 	SUSTAINABILITY IN FISHING TOURISM
 Positive and Negative impacts of fishing tourism on the local people in your community How has fishing tourism changed the community in the last five (5) years? How does fishing tourism influence you and your community? How do you think fishing tourism will affect your local community in the next five (5) years? 	➤ INFLUENCE OF FISHING TOURISM IN THE COMMUNITY, PEOPLE AND PLACE

FISH TOURISM COMPANIES IN NORWAY:

XXLofoten AS: Is a popular fish tour company in Norway located in Lofoten.

The company size is around 50 employees. It was founded in 2005.

The company offers enjoyable fishing vacations using fishing boats attached with a line wheel as fishing gear and offer thermos suits to tourists in case of unpredictable weather. They offer 4-hour fishing trips outside the coast of Lofoten sea and focus on deep sea fishing. The company has a heritage boat cruise called MS Symra and it turned 100 years old in 2017. The boat is protected by the Norwegian Directorate

for Cultural Heritage. The boat is certified for 38 passengers and has 10 fishing stations. The company's recommendation for a group is maximum 25 persons if the main purpose is fishing. MS Symra has traditional fishing equipment called line wheel installed to the boat that makes it easier for fishing tourists to use and catch fish rather than rods. The boat is designed for deep sea fishing. The traditional fishing equipment installed to the boat is around 10 pieces of equipment and it involves 2 people per one piece of equipment. Below is a picture of a fishing trip where I joined in as the crew on the boat.

Go2Lofoten AS: The company is a local family business. The company officially started operation in 2018. It is in the Svolvaer community of Lofoten. It is a local family business that offers fishing trip activities. The company offers fishing equipment, flotation suits and rainwear to borrow. It offers to fillet the fish for the tourists while on the sea. The company has employed residents to help facilitate its business and tourism activities.

Field Survey 1:

 The field survey 1 took place on 18th and 19th of June 2023 with fifteen local people. The local people interviewed were hotel employees and fish restaurant owners. The first interview on the 18th of June 2023 was with local employees working in a nearby hotel. I asked for permission with the front desk management to conduct a survey with their local employees and it was granted. On the 19th of June 2023, I walked into some fish restaurants and met the owners and asked for permission to get some information about their community and fishing tourism for the sake of educational purposes. The questions asked could be found on appendix 2 page 42 attached to this thesis. Same questionnaires and questions were asked to both the hotel local employees and fish restaurant owners. Most of the questions on the questionnaires are related to employment and revenue, marine environment, international fishing tourists' attitude and behaviour, fishing regulations for fishing tourists and its impacts so far and community development in relation with fishing tourism business. These interviews were conducted on 18th and 19th of June 2023 respectively. A total of thirteen questionnaires were administered to the hotel local employees and seven questionnaires were administered to fish restaurant owners. After some checks, only fifteen correct answers to the questions are selected for the research work. Most of the answers to the questions are given from strongly agree to strongly disagree using Likert scale of 5 scale.

Field Survey 2:

• The Field Survey 2 took place on 21st July. I went on a fishing trip with one of the tour companies including international tourists of 20 crew members (18 adults and 2 kids). The trip lasted from 09:00 and 13:00. Most of the questions on the questionnaires for the international fishing tourists include the regulations in Norway for fishing tourism and its positive and negative impacts on their fishing experiences, the community where the fishing activities take place, Norwegian nature and among others. I was able to get useful complete answers to the questions on the questionnaires from 15 adult international fishing tourists. The

answers given to most of the questions range from strongly agree to strongly disagree using 5 scale Likert scale, to get the perception of the international fishing tourists. The fifteen correctly answered questions are utilized for this study.

3.3 RESEARCH ANALYSIS:

The collected data were compiled and systematically examined for any errors and missing information. The overview of the interview guide is presented in a structured form and analysis from the two informants were stated in words. The analysis of the locals and international fishing tourists were analysed using the 5-point Likert scale ranging from strongly agree, agree, neutral, disagree and strongly disagree to every statement on the questionnaires given to the respondents.

The Likert scale offers 5 options for responses to a statement or question, which allows respondents to express their degree of agreement with the statement or question on a scale ranging from positive to negative strength of the statement. This type of scale assumes that attitudes can be assessed, and that the strength or intensity of an attitude is linear, that is on a continuum from strongly agree to strongly disagree. For instance, a numerical value would be assigned to each of the five answers that would be used to assess the attitude being studied (Mcleod, 2023). The positive to negative strength of the Likert scale to each question would be determined as; See figure 8.

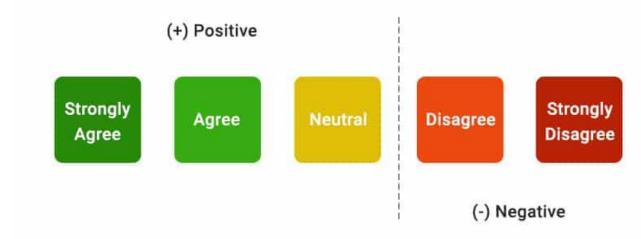


Fig 8: Likert Scale interpretation Source: www.questionpro.com

4.0 RESULTS AND ANALYSIS:

This chapter presents the information obtained from the analyzed interview with tour guides and the responses from the local people(n=15) and fishing tourists (n=15) on a 5-scale Likert scale from strongly agree to strongly disagree.

4.1 Results from structured interview with tour guides regarding the Regulations of Fishing Tourism:

Informant A: Informant A expressed that the current regulation for international tourists has no disadvantage for their future practice within the fishing tour business. Also, the 18-kilo limit export for fishing tourists has no negative effect or tourists desire in fishing in Norway. The informant expressed it is good they have that limit because there is high focus on sustainability, the 18 kilo is on the positive side. The informant said there are currently no challenges that the regulations have for international tourists and their business, when the tourists are informed about the limit, and the focus, they are happy and just want to experience the fun trip and nature. There are positive impacts with the current regulations and still attracts more fishing tourists into the community and revenue.

Informant B: There is no disadvantage with the current regulations for future practice with their tour business. Informant B stated that tourists that come for fishing trips and patronize tour companies do not take out many fish because of their guidance and control to ensure sustainable use of the sea and its resources, also there are limits maintained, and fishing tourists mostly take fish just for dinner. Informant B further expressed that fishing tourists that hire private boats from boat charters for themselves without a tour guide, take many fish from the sea even if they cannot export more than 18 kilos, which could lead to reduced fish stocks if it continues. The informant B also stated that there are no challenges with the regulations on international fishing tourists and their tour business. They teach tourists the good ways to enjoy and follow the regulations while on the trip. The informant stated that there is a positive side with the regulations on its impacts with tourists visiting the community and it is mostly followed when fishing tourists patronize them as the tour operators, for teachings and instructions to follow, the informant expressed tourists' satisfaction and understanding with the regulations.

4.2 Results from structured interview with tour guides regarding the Sustainability in Fishing Tourism:

Informant A: According to informant A, sustainability in fishing tourism means maintaining small catches and reserves for the future. The informant further expressed that the community can facilitate sustainable fishing tourism by giving more information to the fishing tourists, and what kind of fish to catch in each season of the year, the informant said the fishing tourists believed that the community have more fish especially cod fish but the tourists are not aware that cod fish under 45cm is on the red list and they are surprised when informed.

The informant expressed that more information and awareness to the tourists would greatly ensure sustainable fishing tourism.

Informant B: Sustainability means we have fish for the future. Informant B expressed that the community including the tour operators would facilitate sustainable fishing tourism by

teaching tourists about the need for sustainability and for future sake by giving tourists a lot of information.

4.3 Results from structured interview with tour guides on the Influence of Fishing Tourism in the Community, People and Place:

Informant A: Informant A expressed that fishing tourism has a positive impact on revenue since fishing tourists buy hotel rooms, restaurants food and other kinds of activities in the community. The informant said the negative aspects come from the local professional fishermen who think or assume that fishing tourism is big and that tourists are taking too much from the tour operating business and thereby disrupting their own catch for commercial purposes.

The informant said the fishing tourism has changed the community compared in the last 5 years, in a way that is exotic, because some fishing tourists think that there are less amount of fish in other places in the world and they believe there are much fish in Norway especially Lofoten and its attractiveness with beautiful scenery, gives interest to fishing tourists into the community.

The informant said the influence fishing tourism has had is business as usual.

The informant expressed that in the future, maybe in the next 5 years, there would be a challenge to get the professionals and the tourists to work together. If the fish stocks continue to go down strong discussions, that even if the tour operators controls the amount of fish tourists take from the sea, but the problem is the other side where fishing tourists go on a fishing trip on their own and fill up their freezers with much fish, and this could lead to hard discussions and conflict between the local professional fishermen and local fishing tour companies if the fish stocks continue to go down. The informant said that 1 kilo of cod fish caught from the boat operated by the tour company creates more money for the community than one kilo of cod fish caught in the local professional fisherman's boat. The informant said one and half kilos of cod fish caught by the tourists cost about 7,000 NOK because they pay hotels and restaurants to prepare them for dinner. But the local professional fisherman gets paid 30 NOK per kilo. With this, the local professional fishermen would bring in harder discussions and maybe conflict if cod fish stocks continue to decrease in amount in the sea.

Informant B: The informant expressed that fishing tourists are important for them and the community and that the major positive impact is revenue. The informant said the negative side is when fishing tourists have or hire a boat and fish for themselves without supervision and information from tour guides, they tend to take more fish from the sea than expected. This could negatively affect the amount of fish stocks in the community.

The informant said the fishing tourism business has changed in the last 5 years, that it is obvious there are more people with interest coming for fishing tour trips.

The informant said the influence of fishing tourism to the community is positive.

The informant does not believe that there would be much change in the next few years, (5 years) instead the informant said it will be the same as today because most fishing tourists come to Lofoten because of the attractive nature and scenery.

Table 4: The Demographic Profile of the Local Respondents in the Study Area. (n=15)

Variables		Number of
		respondents
Sex	Male	7
	Female	8
Age (years)	18-30	7
<i>5</i> (, ,	31-40	7
	>40	1
Education	Primary	2
	Secondary	7
	Vocational Education	2
	University	4
Occupation	Employed	11
	Business Owners	4

4.4 ANALYSIS OF THE LOCAL PEOPLE RESPONSE USING LIKERT SCALE

The data on Tables are the important findings of this research work directly linked with the research questions.

Table 5: Shows the local people's (n=15) response to the question: Has fishing tourism helped to reduce unemployment rate in the community? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement respondents	Agreement Level	No of local	
Has fishing tourism helped to	Strongly Agree	4	
Reduce unemployment rate in	Agree	4	
the community?	Neutral	4	
	Disagree	3	
	Strongly Disagree	0	

The result shows that most local respondents are positive and 3 are negative to the question. Most of the local respondents interviewed admitted that fishing tourism activities have helped reduce unemployment in the community.

Table 6: Shows the local people's (n=15) response to the question: Does your community have more fish for tourists to catch, export and consume? Answers given from a 5-1 Likert scale from 5=strongly agree to 1=Strongly disagree.

Statement	Agreement Level	No of local respondents	
Does your community have more Fish for tourists to catch, export and consume?	Strongly Agree Agree Neutral Disagree Strongly Disagree	0 4 8 2 1	

The result shows that 12 locals are positive and 3 are negative about the question/statement. Most of the locals interviewed are on a neutral level that their community has more fish for tourists to catch, export and consume. Not much, not less either.

Table 7: Shows the local people's (15) response to the question: Does the Norwegian fishing regulations related to the amount of 18 kilos allowed to be brought out of the country affect tourists' activities positively? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement	Agreement Level	No of local respondents
Does Norwegian fishing	Strongly Agree	0
regulations related to	Agree	5
the amount of fish	Neutral	8
18 kilos allowed to be	Disagree	2
Brought out of the country affect tourist's activities positively?	Strongly Disagree	0

The result shows that 13 locals are positive and 2 are negative to the statement. This shows that most of the locals interviewed are positive about the statement.

Table 8: Shows the local people (n=15) response to the question: Does fishing regulations affect tourists' activities negatively? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Agreement Level	No of local respondents	
Strongly Agree	0	
Agree	1	
Neutral	4	
Disagree	9	
Strongly Disagree	1	
	Strongly Agree Agree Neutral Disagree	Strongly Agree 0 Agree 1 Neutral 4 Disagree 9

Table 9: Shows the local response (15) to the question: Are the road networks satisfactory for the tourist activity in your area? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement	Agreement Level	No of local responses
Are the road networks satisfactory	Strongly Agree	1
For the tourist activity in your area?	Agree	3
	Neutral	7
	Disagree	4
	Strongly Disagree	0

The result shows a positive statement. But mostly accepted on a Neutral level.

Table 10: Shows the local people (15) response to the question: Does fishing tourism activities help to boost your business, sales, and income? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement	Agreement level	No of local responses	
Do fishing tourism activities help	Strongly Agree	6	
To boost your business, sales and	Agree	6	
Income?	Neutral	3	
	Disagree	0	
	Strongly Disagree	0	

The result shows that the local people interviewed are positive to the statement/question.

Table 11: This shows the local people's (15) response to the question: What is your opinion on fishing tourists' general behaviors regarding the marine environment (leaving litter behind, fishing more than needed, throwing small fish away)? Positive or negative view? Answers to this question were calculated in percentage from the numbers of the local people interviewed.

Statement	View (Perception)	Local respondents (N=15)	Percentage (%)
What is your opinion	Positive	11	73%
On fishing tourists'	Neutral	3	20%
behaviors regarding The marine environment (Leaving litter behind, fishing more than needed throwing small fish away)		1	7%

The result shows that most of the local people that are interviewed are positive about the statement/question on behavior of international fishing tourists in the marine environment.

Table 12: The Demographic Profile of the International Fishing Tourists that visited the study area.

/ariables		No of Fishing Tourists
Sex	Male	8
	Female	7
age (years)	20-30 years	3
	31-40 years	2
	40-50 years	5
	> 50	5
lucation	Primary	0
	Secondary	1
	Vocational Education	3
	University	11

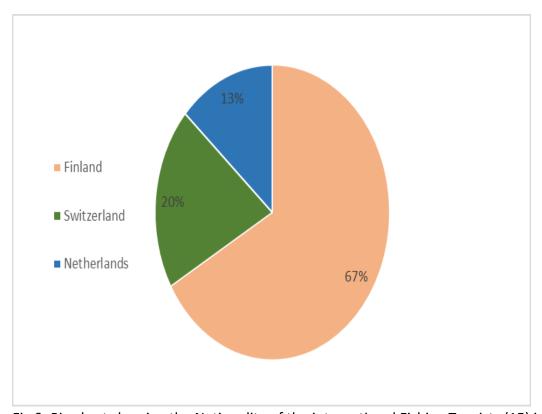


Fig 9: Pie chart showing the Nationality of the international Fishing Tourists (15) in percentage.

4.5 ANALYSIS OF THE INTERNATIONAL FISHING TOURISTS' RESPONSE USING LIKERT SCALE (STRONGLY AGREE TO STRONGLY DISAGREE).

Table 13: Shows the fish tourists (15) opinion to the question: Do you find Norwegian nature more attractive for fishing activities compared to other countries you have visited? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement	Agreement Level	Number of Responses
Do you find Norwegian	Strongly Agree	7
nature more attractive for	Agree	8
fishing activities compared	Neutral	0
to other countries you have	Disagree	0
Visited?	Strongly Disagree	0

The result shows a positive level to the question/statement. The nature of Norway is more attractive to the tourists interviewed compared to other countries they have visited. This shows that attractive nature and scenery has an influence on fishing tourism according to the data collected for this research.

Table 14: Shows the fish tourists opinion to the question: Would you recommend Norway as a good destination for a fishing trip? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement	Agreement Level	No of Responses
Would you recommend	Strongly Agree	14
Norway as a good	Agree	1
Destination for	Neutral	0
a fishing trips?	Disagree	0
	Strongly Disagree	0

The result shows that the tourists interviewed are positive and would highly recommend Norway as a destination spot for fishing trips. This directly shows that fishing tourism has a strong influence in Norway and as such a fishing fun spot for foreigners. The influence is based on place.

Table 15 below shows the number of times the fishing tourists had visited Norway (n=15)

Number of times visit	Once	Twice	Thrice	First time
Number of fishing tourists	12	1	1	1

Table 16: shows the important things the fishing tourists listed as their personal check before going for a fishing trip in a country and community. (n=15)

Fishing Tourists	Important thing checked before going on a fishing trip in a country and community
1	Safety, Price, and Recommendation
2	Price and content
3	Healthy fish capacity and volume
4	Boat, tour guides profile, safety
5	Price and recommendation
6	Safety, trip activities, knowledge about the country and community
7	Is there a lot fish to catch, safety, environment
8	Safety, type of fish in the area to catch, and price
9	Fish do not get wasted
10	Safety and weather
11	Safety and Trip activities
12	The rules
13	Safety and Nature
14	Fish do not get wasted, no overfishing
15	Safety, weather and recommendation

From the table on the list of important things checked by the tourists before making a trip to a country and community, among the top was safety, recommendation, and price. (n=15)

Table 17: Do you find the Norwegian fishing regulations allowing a maximum of 18 kilos of fish to be brought out of the country negative for your fishing experience? Answers given from a 5-1 Likert scale, where 5 is Strongly agree to 1 is strongly disagree.

Statement A	Agreement Level	Number of Responses
Do you find the	Strongly Agree	0
Norwegian fishing	Agree	1
Regulations allowing	Neutral	9
a maximum of 18 kilos	Disagree	1
of fish to be brought out of the country negative for your fishing Experience?	Strongly Disagree	4

The result shows that the tourists interviewed accepted the regulation that allows 18 kilos of fish out of the country and as such the stated regulation does not affect their fishing experience.

Table 18: Shows the fish tourists (15) opinion to the question: Do you find the Norwegian fishing regulations that you have to be registered at a fishing camp to be allowed to bring fish out of the country negative for your fishing experience?

Statement	Agreement Level	No of Response (Tourists)
Do you find the Norwegian	Strongly Agree	0
fishing regulations that	Agree	2
you have to be registered	Neutral	8
at a fishing camp to be	Disagree	3
allowed to bring fish out of the country negative for your fishing experience?	Strongly Disagree	2

The result shows that most of the tourists interviewed are positive about the question/statement.

5.0 DISCUSSION

The purpose of this research is to explore and see the impacts of fishing tourism management in Norway, Sustainability, and the influence of this activity. Focusing on Svolvaer in Lofoten as the case study.

5.1 REGULATIONS OF FISHING TOURISM IN NORWAY:

Data generated with the international fishing tourists about if the regulation for the 18kg export limit affects their fishing experience negatively, most of the tourists interviewed were not worried about it, most are positive. Also, the tour guides stated that the regulation has no disadvantage on international tourists and that the 18 kilos have no negative effect on tourist's desire in fishing in Norway, most of the locals interviewed are positive about it, stating that the 18 kilos limit remains positive to the foreign tourists. Zhuo (2012) in his study at North Cape during when the export limit was 15 kilos, stated that the export quota of 15 kilos has not declined the amount or number of tourists. In Zhuo interview with the tour guides, it was stated that the export quota of 15 kilos may scare potential customers but the tourists that have visited Norway before the new regulation of 15 kilos export limit still came back to Norway due to their thrilling experience with Norway's fishing environment even though they have heard about the new regulation before their visit to Norway again. With the previous study by Zhuo, compared to my study which has a new regulation of 18 kilos export limit, it is clear, the data gathered from the tour guides, locals, and tourists that the maximum of 18 kilos does not affect international fishing tourists desire for fishing in Norway. There is a concurrent pattern with the time of the 15kg and today's 18kg export limit. In the sense that the tourists do not really worry about the export limit but find pleasure in the experience. This regulation has been helpful in preserving fish stocks in Norway. Also, the checks and fines by the Norwegian Custom Authority at the airport and border has also helped in the success of the implementation of the export limit. The previous study conducted by Zhuo, according to the interview with the anglers in China, fish stocks is low in Dongtou islands and big catch is hard to get. Anglers move to a different island called Nanji islands regardless of if it is a protected area. The basic challenge is that there are little or no strict regulations except those for seasonal limit but no specific minimum size limit or regulated quota limit in Wenzhou, China. This has caused fish stocks to be in competition and under pressure for consumption needs in Wenzhou's large population. In this sense, Norway's export limit and minimum size limit is one of the yardsticks to attain one of the UN Sustainable development goals, goal 14. The minimum size limit will effectively regulate harvesting (small fish) and end destructive fishing practices, while the export limit would reduce and end overfishing, illegal and unreported catch, and fishing practices. The export limit could also be viewed to restore fish stocks in the shortest time practicable. In other words, this could directly promote sustainable fishing. According to the United Nations (2021), a report states that sustainable fisheries accounted for approximately 0.1% of global GDP in 2017. Afterwards, the United Nation (2021) progress report states that 35.4% of global fish stocks were overfished in 2019. Norway's regulations on export limit and minimum size are probably meant to mitigate this challenge and preserve fish stocks.

5.2 SUSTAINABILITY IN FISHING TOURISM:

Current study and data generated in this research, shows the economic impacts of fishing tourism towards income and employment is certainly a key in Svolvaer community. The income is considered directly and indirectly. The locals accepted that fishing tourism can boost income and businesses in the community, a paper published by Kauppila and Karjalainen (2012) on a study conducted in Northern Finland shows the direct income of fishing tourism; each single adult fishing tourist spent 131 euros per fishing trip in the study area, same study showed that in 2009, the direct economic income of fishing tourism was (131 euros \times 8924 trips) 1,169,044 euros (including tax). The study reveals that it is possible to distribute the direct fishing tourism income by the categories of expenditure. The key point is the length of stay of the international fishing tourist. The longer the stay, the more money is spent, and this includes businesses in the area such as hotels and restaurants. In the current study, most of the locals interviewed are positive about fishing tourism aid in reducing unemployment rate in the community and the fishing tour guides accepted that fishing tourism is all about business as usual. Marine fishing tourism expenditure creates approximately 999 jobs in Northern Norway and nearly 900 in other regions including Western Norway, South Norway, and Mid Norway. About two-third of these jobs are produced within the accommodation and restaurant sector (Borch et al; 2011). The study reveals that marine fishing tourism counts for almost 9% of workplaces in Northern Norway within the accommodation and restaurant sector. These studies on economic impacts both in employment and income boost from marine fishing tourism proves my compilation of data analysis collected for the study on the area of employment, income, and business boost to be positive.

The UN sustainable development goal 8; decent work and economic growth is being maintained in fishing tourism. Data generated (about employment) and previous studies that analysed the economic structure of marine fishing tourism in Norway proves and support UN sustainable development goal 8 in the study. Data presentation on the demographic profile of the locals, eight are female and seven are male, eleven are employed and four are business owners, according to United Nations (2017), Target 8.5: "full employment and decent work with equal pay including men and women". The local employees interviewed get second-hand contact with the international fishing tourists who support their workplace by paying for hotel rooms and spending days to weeks. This contributes to the revenue generated by the hotel management. Also, the fish restaurant owners get second-hand contact with the international fishing tourists, most of the fish caught by international fishing tourists are cooked and prepared for the tourists by the fish restaurant owners which serves as an income for their business, be it male or female. The first-hand contact with the international fishing tourists is the fishing tour companies, they derive income from fishing trips done with the tourists. They can go on one or two trips per day on a boat and generate a good amount of money and thereby creating direct employment for the locals to work under their company. Also, according to the United Nations (2017), Target 8.9: Promote beneficial and Sustainable tourism "By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promote local culture and products". Fishing tourism has served as an alternative source of job and income for most local fishermen, not just income but to promote and showcase their local culture, heritage, nature, and products to visitors through fishing as a means of tourism.

The interview with tour guides towards sustainability shows that organized fishing

tourism does not pose threats to marine resources. A study by Zhuo (2012), it was stated that the Institute of Marine Research "HavforskningsInstituttet" says neither coastal cod nor other species of fish are threatened by organized fishing tourism. The tour guides interviewed in the current study believe that international tourists that rent a boat from boat rentals and go fishing by themselves take many fish from the sea which they think has led to the reduced coastal cod in the area. In the interview, the tour guides seek control measures and regulations for international fishing tourists that fish for themselves with private boats, to maintain sustainability in fishing tourism and reduce conflict that might turn out between the fishing tour operators and commercial fishermen.

The information gathered from the locals about their view (positive or negative) on tourists' behaviour regarding the marine environment on leaving litter behind appeared to be positive. Almost all the locals interviewed think that fishing tourists are not leaving litter on the sea (Norwegian Sea) in the study area. Most of the fishing tourists in my study were in the age groups of 40-50 years (33.3%) and above 50 years (33.3%) and mostly educated with university education. They are all experienced fishing tourists. With a brief conversation with the tourists, they indicated that they own the responsibility to maintain a healthy marine environment while fishing on a boat by not throwing litter on the sea. Lewin et al; 2020 conducted a research on anglers' attitude and behaviour regarding marine litter on German Baltic sea, the study reveals that most of the anglers were aware of the environmental issue caused by marine litter, the study reveals that anglers were concerned about marine litter and they were aware of their responsibility to avoid marine litter, so there were little or no issues from the experienced anglers leaving litter behind. Lewin further stated that proper understanding of the sense of groups engaged in nature use is essential in developing efficient management and thus altering environmental unfriendly behaviour. Most of the anglers interviewed by Lewin and his colleagues were male with a mean age of 49.9 years.

Data generated on marine litter, shows that fishing tourism has a role in maintaining one of the UN goals, goal 14, under target 14:1 reduce marine pollution which states that "By 2025, prevent and significantly reduce marine pollution of all kinds, which includes; marine debris", marine debris could also be an example of leaving litter behind, throwing small dead fish etc. which can pollute the marine environment and cause environmental issues including marine life. In the current study and previous study, experienced and older fishing tourists are showing concern and support to reduce marine pollution.

The locals from the current study mostly accepted that the road network satisfactory level in their community is on a neutral level, this also shows a positive outlook but not highly. A study was conducted by Denstadli et al; (2011) on self-drive tourist's satisfaction with and loyalty toward scenic road in Norway, the study comprises of two scenic roads in Norway; Geiranger/Trollstigen route in Southern part of Norway and the route through the Lofoten Islands in Northern Norway, the study reveals that roadside facilities play an important role in achieving satisfaction and loyalty among tourists driving in with cars and suggested that route managers should improve the quality of the road infrastructure and services. The study also revealed that it is necessary to take into careful consideration of motorists' desire to experience attractive sceneries to increase full satisfaction of road routes. This study supports the current study of not having a highly accepted road satisfaction in the study area. The road facilities and road routes in Lofoten island need quality improvement, to maintain a well-defined sustainable community through the UN

sustainable goal 11, Sustainable Cities and Communities.

Data generated in the current study; if the community has more fish for tourists to catch, export and consume? reveals that most of the locals are on a neutral level to the question which means not much, not less either. The result showed positive to the question anyways. Ashrafi et al; (2020) conducted a study in two areas: the coast of northern Norway and the high sea area of the Barents Sea, the study revealed that seasonality plays an important role in stock abundance. From the result, seasonality is only present in the northern coast of Norway and less in the high sea area of the Barents Sea.

This also applies to the time of the year when tourists go on fishing trips. They could catch more fish in a particular time of the year than other times of the year. Therefore, this supports the current study on a neutral level if they have more fish for tourists to catch, export and consume. In other words, season affects the amount of catch. When I joined the fishing trip for this study, around July 2023, every crew member including me was able to catch at least two saithe (coalfish), out of the 18-adult crew, no one was able to catch any other species than saithe. It was in abundance around the time I conducted this survey. Although the fishing area matters too.

In the interview with tour guides, it is stated that all catches made on each trip are reported to the Directorate of Fisheries. This however supports Sustainable Development goal 12: Responsible consumption and production: in Target 12.6: Encourage companies to adopt sustainable practices and sustainable reporting. This is in line with the fishing tourism activities in Norway.

5.3 INFLUENCE OF FISHING TOURISM IN THE COMMUNITY, PLACE AND PEOPLE:

Norway is regarded as a top fishing destination spot by international fishing tourists. Data generated in the current study, shows that, the international fishing tourists were asked if they would recommend Norway as a good destination for a fishing trip and all of them agreed excellently. Brenner (2014) conducted a study in the Westfjords of Iceland and in the survey, the international tourists (n=125) were asked their favorite fishing trip destination, Norway was placed first with 82%.

Data generated in the current study about things checked by tourists before embarking on a fishing destination; the top three factors considered are safety, recommendation, and price respectively and among others. These set of factors appeared the most among the interviewed tourists. Others are nature, weather and so on. This study is in opposition with Brenner (2014), who conducted a survey on anglers and asked what their motivational factors are for choosing Westfjords in Iceland as their sea-angling destination, the top three of the factors are Big Fish, Beautiful Landscape, and abundance of fish. The top three factors are completely different from the current study but are also important factors among tourists. Cifci et al; (2021) conducted a study to examine fishing tourists' motivations at wetland destinations by simply applying the push and pull motivation theory. The study reveals determinants in the two motivational theories; the push motivation: fishing, nature, and socio-cultural attributes of the destination. The three determinants for the pull motivation are geographical attributes/infrastructure, local culture, and activity. Under these determinants, there are still basic factors that trigger motivation for the destination of the study area Wetland.

6.0 CONCLUSION AND RECOMMENDATION

The results have shown that fishing tourism has a chance to create direct and indirect employment for local communities and empower their community in a sustainable way. So far, the export limit and minimum size limit have positive impacts and promote the UN Sustainable goal 14. It is clear from the result of findings that there have been no negative impacts on the export limit and the international fishing tourists experience and desire to fish in Norway.

Norway is regarded as a top fishing destination spot among international fishing tourists, this has a direct influence concerning the communities and place. It is like a trademark on the community.

There are strong relations on the results with the UN Sustainable Development Goals, more specifically goals 8, 11, 12 and 14, these are strongly connected and in line with fishing tourism activities in Norway. This shows that to some degree, fishing tourism practices in Norway are sustainable.

Most of the fishing tourists interviewed consider; safety, recommendation, and price before embarking on a fishing destination spot. This should also be put into account among the community managers to ensure more influx of tourists into the area.

Awareness and responsibility to protect the marine environment from litter should be spread among younger adults who are interested in marine life including fishing and tourism. From my study and previous studies, it has been revealed that older adults from the age of 40-50 and 50 and above with some form of education take responsibility in protecting the marine environment while using it. From the result, international fishing tourists are ensuring that the marine environment is free from litter.

Business strategies to improve the quality of service in fishing tourism in the area is recommended.

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www.questionpro.com

APPENDIX ONE

INTERVIEW GUIDE

This interview guide is for educational research purposes and its focus is on the positive and negative impacts of fishing tourism management in Norway.

The survey will like to know about the Norwegian Fishing Tourists visiting Norway and the Norwegian Fishing Regulations.

QUESTION 1

- (i) What is the name of your fishing tour company?
- (ii) How long have you been into the fishing tourism business legally?

QUESTION 2

- (i) Is the current Norwegian fish regulation for international fish tourists a disadvantage for your future practice within the fishing tour business?
- (ii) Does the limit of 18 kilos of fish products that can be exported out of Norway affect international tourists`desire in fishing for fun?
- (iii) What are the challenges the regulations for international fish tourists have done to your fishing tour business?
- (iv) Do the current fish regulations impact tourists visiting your community? If any, what are the positive and negative impacts?

QUESTION 3

- (i) What does the term "Sustainability" mean to you?
- (ii) How can your community facilitate sustainable fishing tourism?

QUESTION 4

- (i) What are the impacts (positive and negative) of fishing tourism on the local people in your community?
- (ii) How has fishing tourism changed the community in the last 5 years? What are the changes?
- (iii) How does fishing tourism influence you and the community?
- (iv) How do you think fishing tourism will affect your local community in the future? Maybe in the next 5 years

Norwegian translation:

INTERVJUGUIDE

Denne intervjuguiden er for utdanning og forskningsformål og har fokus på å evaluere

fisketurisme og de positive og negative virkningene av regelverket for internasjonal fisketurisme og dens

innflytelse på bærekraft i samfunnet ditt.

SPØRSMÅL 1

- (i) Hva er navnet på fisketurisme-selskapet ditt?
- (ii) Hvor lenge har du vært lovlig i fisketurismebransjen?

SPØRSMÅL 2

- (i) Er dagens forskrift for regulering av fiske for internasjonale turister en ulempe for deg og din fremtidig praksis innenfor fisketurisme?
- (ii) Påvirker den øvre grense på 18 kilo fiskeprodukter som kan eksporteres ut av Norge, turisters lyst til å fiske for moro skyld?
- (iii) Hvilke utfordringer har dagens regelverket for internasjonale fisketurister påført din fisketurisme virksomhet?
- (iv) Påvirker gjeldende regelverket internasjonale turister som besøker lokalsamfunnet ditt? Hvis noen, hva er de positive og negative effekter?

SPØRSMÅL 3

- (i) Hva betyr begrepet "bærekraft" for deg?
- (ii) Hvordan kan lokalsamfunnet ditt legge til rette for bærekraftig fisketurisme?

SPØRSMÅL 4

- (i) Hva er konsekvensene (positive og negative) av fisketurisme på lokalbefolkningen i ditt lokalmiljø? (ii) Hvordan har fisketurisme endret samfunnet de siste 5 årene? Hva er endringene?
- (iii) Hvordan påvirker fisketurisme deg og samfunnet?
- (iv) Hvordan tror du fisketurisme vil påvirke i ditt lokalsamfunn fremover? Kanskje inn de neste 5 årene

APPENDIX TWO

QUESTIONNAIRE 1

THEME: **FISHING TOURISM** (Paper-Based Survey for Local people including indigenes, business owners, restaurants workers and camps directly and indirectly benefiting from fishing tourism activities)

SECTION ONE: DEMOGRAPHY PROFILE OF RESPONDENTS

SEX: MALE FEMALE
AGE : 15-30 years 31-40 years Above 40
EDUCATION: Primary Secondary Vocational Training University
OCCUPATION: Self employed Business Service holder
SECTION TWO:
(i) Has fishing tourism helped to reduce unemployment rate in the community? Strongly Agree Agree Neutral Disagree Strongly Disagree
(ii) Can fishing tourism improve your community development if it is sustainable? Strongly Agree Agree Neutral Disagree Strongly Disagree
(iii) Do you think that the fish tourists are taking too much fish from the sea? Strongly Agree Agree Neutral Disagree Strongly Disagree
(iv) Does your fishing community have more fish for tourists to catch, export and consume? Strongly Agree Agree Neutral Disagree Strongly Disagree
(v) Do Norwegian fishing regulations related to the amount of fish (18kg) allowed to be brought out of the country affect tourist's activities positively? Strongly Agree AgreeNeutralDisagreeStrongly Disagree
(vi) Do fishing regulations affect tourist`s activities negatively? Strongly Agree Agree Neutral Disagree Strongly Agree
(vii) Does your local community have enough accommodation, such as hotels and camping, to hous tourists during the busiest tourist period?Strongly Agree Agree Neutral Disagree Strongly Disagree
(viii) Are the road networks satisfactory for the tourist activity in your area? Strongly Agree Agree Neutral Disagree Strongly Disagree
(ix) Do fishing tourism activities help to boost your business, sales and income? Strongly Agree Agree Neutral Disagree Strongly Disagree

(x) What is your opinion on fishing tourists' general behaviors regarding the marine environment (leaving litter behind, fishing more than needed, throwing small fish away? Positive or Negative view?

APPENDIX THREE

QUESTIONNAIRE 2
THEME: FISHING TOURISM (Tourist`s Perception Paper-based survey)
SECTION ONE
SEX: MALE FEMALE
AGE: 20-30 years 31-40 years 40-50 years Above 50
EDUCATION: Primary Secondary Vocational Training University
NATIONALITY:
SECTION TWO
(i) Do you find easy road access to fishing camps, fish restaurants and the sea in the fishing community? Strongly Agree Agree NeutralDisagree Strongly Disagree
(ii) Do you find Norwegian nature more attractive for fishing activities compared to other countries you have visited? Strongly Agree Agree Neutral Disagree Strongly Disagree
(iii) Have you experienced any accidents related to humans or boats during your fishing trip and activities? Strongly Agree Agree Neutral Disagree Strongly Disagree
(iv) Would you recommend Norway as a good destination for a fishing trip? Strongly Agree Agree Neutral Disagree Strongly Agree
(v) How many times have you visited Norway for Fishing trip? Specify
(vi) Is the fishing community environment safe and healthy? Strongly Agree Agree Neutral Disagree Strongly Disagree
(vii) What are the important things you check before going for a fishing trip in a country/community?List them in order of importance(viii) Have the boats you have used for fishing been in good condition?Strongly Agree Agree Neutral Disagree Strongly Disagree
(ix) Do you find the Norwegian fishing regulations allowing a maximum of 18kg to be brought out of the country negative for your fishing experience? Strongly Agree Agree Neutral Disagree Strongly Disagree

(x) Do you find the	he Norwe	gian fishing	g regulations	that you have to	be registered a	at a fishing	camp to
be allowed to brin	ng fish ou	t of the cou	ntry negative	for your fishing	experience?		
Strongly Agree_	_Agree	_Neutral	_ Disagree	_ Strongly Disa	gree		

APPENDIX FOUR

INFORMATION LETTER

Vil du delta i forskningsprosjektet / Will you participate in the research project: Positively and Negatively impacts of fishing Tourism Management in Norway

Formålet med prosjektet / Aim of the project

Dette er et spørsmål til deg om du vil delta i et forskningsprosjekt hvor formålet er å

• Aim of the project: (1) The fishing tourism regulations in Norway (2) Sustainability of fishing

tourism activities in Norway (3) Influence of fishing tourism on the local communities, places

and people.

• This research project is a Master Thesis, so it is for educational purposes.

Hvorfor får du spørsmål om å delta? / Why are you asked to participate? Du får denne forespørselen fordi / You receive this request because:

• The research project is generally focused on fishing tourism management and its influence among the local people, our main target is to oversee how fishing tour companies operates in relation to the regulations and its impacts on tourists, sustainability and influence in the community, we request to get information from fishing tour operators/fishermen operating in Lofoten, and our most concern is on Svolvær. We contacted you because we have seen on the internet that you operate in our chosen study area.

Hvem er ansvarlig for forskningsprosjektet? / Who is responsible for the research project?

• Nord University is responsible for the personal data used in the project.

Participation is voluntary.

Participation in the project is voluntary. There will be no negative consequences for you if you do not want to participate or later choose to ask for your information to be deleted.

Hva innebærer det for deg å delta?/ What does participating mean for you? Beskriv/Describe:

- The method for participation is through a personal interview.
- The personal data that would be collected is, company name and title.
- The data is registered through notes and sound recordings.

Kort om personvern / Brief about privacy

Vi vil bare bruke opplysningene om deg til formålene vi har fortalt om i dette skrivet. Vi

behandler

personopplysningene konfidensielt og i samsvar med personvernregelverket. Du kan lese mer om personvern under*. / We will only use the information about you for the purposes we have described in this article. We process the personal data confidentiality and in accordance with the privacy regulations. You can read more about privacy under *.

Med vennlig hilsen

Marit Bjørnevik Harrison Okoh prosjektansvarlig eventuelt student (Forsker/veileder)

Du kan lese mer om personvern på neste side. / You can read more about privacy on the next pages (in norwegian)

Utdypende om personvern – hvordan vi oppbevarer og bruker dine opplysninger / Elaborating on privacy - how we store and use your information.

- The personal data will be used by me (the researcher) and my supervisors.
- We do not request for your personal information; we only request for company name and title.
- Sound recordings and notes would be taken, to help us analyze our results, the sound recordings will not be published or available on the internet, we will only use the information on the recordings to analyze the aim of the research and this will be published on the Nord University online Library.

Hva gir oss rett til å behandle personopplysninger om deg?

Vi behandler opplysningene om deg for formål knyttet til vitenskapelig forskning, og fordi forskningsprosjektet er vurdert å være i allmennhetens interesse.

På oppdrag fra [behandlingsansvarlig institusjon] har personverntjenestene ved Sikt – Kunnskapssektorens tjenesteleverandør, vurdert at behandlingen av personopplysninger i dette

prosjektet er i samsvar med personvernregelverket.

Dine rettigheter

Så lenge du kan identifiseres i datamaterialet, har du rett til å protestere, be om innsyn, og til retting

og sletting av opplysninger vi behandler om deg. Du vil da høre fra oss innen en måned. Vi vil gi deg

en god begrunnelse hvis vi mener at du ikke kan identifiseres, eller at rettighetene ikke kan utøves.

Du har også rett til å klage til Datatilsynet om hvordan vi behandler dine opplysninger.

Hva skjer med personopplysningene dine når forskningsprosjektet avsluttes? / What happens to personal data when the research project ends? The project is scheduled to end on 31st August 2023.

The information will then be deleted. The sound recordings will be deleted on the end of project date.

Questions

If you have any questions or wish to exercise your rights, please contact:

- Førsteamanuensis Marit Bjørnevik. Marit.bjornevik@nord.no.
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If you have questions related to Sikt's assessment of the project, you can contact us by email:

personverntjenester@sikt.no, or by phone: 73 98 40 40.