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Senja

Communal housing for tourists and seasonal workers on Senja

Diploma project 2018
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Silsand is the biggest city on the island of Senja with approx 1515 inhabitants. Silsand is situated in connection with a bridge to the biggest city in the area, Finnsnes, with 4700 inhabitants.

From the airports in Tromsø and Bardufoss one have to drive a car to Silsand, or take a regular bus which does not go very often. But to come all the way to Senjahopen you have to drive your own car.

Senjahopen is the biggest fishing community on Senja.

To Tromsø from Oslo there are many flights every day, all over the year. More and more during the winter time since the Aurora Borealis is attracting people to come.

The area of Senja is half the size of the swedish island Gotland on the swedish east coast.

Senja
- Area: 1586 km²
- Inhabitants: 7800 people
- Highest point: 984 m above sea

Gotland
- Area: 3184 km²
- Inhabitants: 58464 people
- Highest point: 82 m above sea

Background to subject of the thesis

Senja is an island situated in the north of Norway. It is often called a Norway in miniature, since the nature is varied from the soft hills in the east to the sharp mountains that dramatically meet the sea on the west side of the island. It is also called the “Adventure Island” since many tourists both from Norway and from the whole world comes here for skiing, biking, kayaking, fishing and hiking etc.

On the island different industries have been of great importance, like a nickel mill, the first water driven electricity factory, graphite production and the most reliable one today the fishing industry.

I first visited Senja two years ago and I found a melancholy feeling in these small clusters and villages along the coast, and the visible life in the societies were limited while the large complexes of the fishing industry is hard to avoid. But it also reminds of a long history and tradition through generations.

I had the opportunity to work in Tromsø for 6 months where my interest and fascination for the north part of Scandinavia grew larger. I lived there from September to March and therefore I experienced the magic of the polar night.

In finding a subject to my thesis my thoughts went to Senja, and I started to look for interesting approaches and issues to work with on the island. At the website of Berg Kommune (One of four municipalities on Senja) I found a strategy of planning for 2016-2020 which contained a couple of issues that interested me:

- Secure the basis of the future housing
- Develop actions to promote the well being amongst the people in Berg, to the existing inhabitants and giving the new inhabitants a reason to stay
- Enforce the outdoor life and activities
- Take care of the municipality’s character as a coast- and fishing community

Later I found interesting issues about the development of the fishing industries in the plan of regulation for Senjahopen, a small fishing community in the north part of Senja.

- Senjahopen is one of the fishing communities that are growing and as a consequence with lack of housing
- In Senjahopen there is a need for seasonal workers in the fishing industries, and these workers need housing

These aspects above are interesting to me as a starting point. Together with my own interest for outdoor life and recreation, it can develop to an interesting type of program for seasonal housing in combination with outdoor life and tourism.

Introduction to Senja

Senja is the second biggest island in Norway. The island in the north of Norway is called “A Norway in miniature” because of the variety in the landscape: the dramatic mountains on the coast dips right into the sea, the idylic archipelago facing the main land and beautiful sandy beaches around the island. Senja has approximately 8000 inhabitants spread over the island of 4 municipalities where the largest city Silsand close to the mainland has 1400 inhabitants. ³

Industries all over the island

The fishing industry have been established on Senja since ages and is the dominating industry today. Especially the Nergård AS fishing company in Senjahopen puts many people to work. In total Senja has 28 companies working in the fishing industry on Senja, and all together the fish products have a turnover of 7 billions NOK each year. ¹ The fishing industry on Senja is growing, for example in Gryllefjord and Senjahopen.

A mining industry is located on Skaland where they extract graphite. There is also a potato processing industry (Silsand), a stair industry (Sollia) and window factory (Sollia) on the island. Lately the government and companies connected to the oil and gas industry have shown interest in the coast outside of Senja, and have started to investigate the possibilities to extract these valuable natural resources. This is of course a threat to the sea, the fisheries and the nature, but is nevertheless giving opportunities for work. ⁴

Studytrip to Senja

I visited the municipality of Berg, I talked to the two major fishing companies, I interviewed the closest hotel and tourist centre. And after talking to the two fishing companies in Senjahopen they expressed a clear need of housing for their seasonal employees during the winter. Also since the harbour is going to be drafted the masses from the seabed will create a new ground and the possibility for more actors in the industry and therefore more workplaces.

Regarding the tourists, the hotels and lodges in the region are often fully booked in the summer time, and additional possibilities for housing for tourists needs to be considered.

Looking at the statistics, as said the fishing industry on Senja is one of the most important industry and the two fishing companies together in Senjahopen employ 75 seasonal workers in the winter season, which is from October to April.

That is when the cod, shrimp and pollock is fished and refined.

Looking at the statistics of tourism, in general the northern tourist often stay for a longer period, which is more than one week, and a majority in the summer season and the amount of tourists is increasing. The tourists want to experience the following activities during their stay in the north of Norway:

- Experience the nature
- Eat local food and drinks
- Be with others
- Experience the midnight sun
- Experience the northern lights
- Fishing in salt water

¹. https://no.wikipedia.org/wiki/Senja
³. https://tv.nrk.no/sok?q=senja
Tourists in Norway 2016
18% Trøndelag
38% Fjord Norge
28% Østlandet
16% Sørlandet
33% Nord-Norge

Tourists in Norway 2015
18% Trøndelag
35% Fjord Norge
27% Østlandet
17% Sørlandet
30% Nord-Norge

Norway vs north of Norway: Difference in commercial guest night from 2015 to 2016, in the winter and summer season
+10%
+34%
+12%
+11%

Tourists in North of Norway 2016
5% Long term base tourists
6% Short term base tourists
91% Long term travelling tourists
12% Short term travelling tourists

What does the tourists do in the north of Norway?
- Experience the nature
- Experience the mountains
- Eat local food and drinks
- Be with others
- Charge the batteries
- Experience local culture and living
- Participate in sightseeing
- Visit national parks
- Experience animal life
- Go for walks (excursion)
- Experience the midnight sun
- Experience the northern lights
- Go on a summit tour
- Sportactivities (paragliding, hiking, kite)
- Fishing in saltwater
- Drive dogsledge

Tourism on Senja
- Restaurant
- Café
- Pub & Bar
- Tourist attraction

Source: www.innovasjonnorge.no
Fishing, fish and fisheries on Senja

Aquaculture - natural resource use by growing organisms in water
Settlement
Former industry
Aquaculture with salmon

45 seasonal workers
130 workers in total

30 seasonal workers
90 workers in total

75 seasonal workers in Senjahopen

Aquaculture with salmon

Deepwater shrimp
Hake
Halibut
Anglerfish
Lumpfish
Cod
Whiting
Mackerel
Herring
Shrimp
Other fish

Cod
Paddock
Whiting
Mackerel
Herring
Shrimp
Other fish

Fish catch value in Norway 2017

Fish catch volume in Norway 2017
In Senjahopen, which has ca 300 inhabitants, there is no hotel, neither a restaurant nor café. Since the tourists are staying for a relatively long time, and the seasonal workers even longer and comes back year after year, therefore it is important to make it possible for them to be integrated somehow in the local society.

This has been leading for me in the searching for a site, that the placing of the housing should not be remote, so that the local inhabitants naturally can interfere. When I was there, I looked at four different sites.

Parallel to this, I have been thinking about the new harbour at its impact on the village. I think that the new harbour somehow could be opened up for people outside of the fishing industry, like a fish market. Since all fish in the industry is being exported, there is no place for people who don’t have contact with a fisherman to buy fish. I chose the site in the middle of the existing neighbourhood since it would create a natural sequence to the harbour for seasonal workers and the fish market for the tourists. Today the bay is perceived as being quite wide, and few people are walking around it. I want to strengthen the form of the bay by enforcing a movement around it giving opportunities to different views of the bay.

- A shelter where you can watch the nesting area of the protected shorebirds
- A wind shelter where you can watch the inlet of Senjahopen and the boats coming in
Image of site model of Senjahopen in scale 1:10000
The site
Fishing factory
Old houses
Drafted area
School
Kindergarten
Food store
Café & store
Possible road to continue
Old houses
Medfjodvaer
Skaland
30 60m
1:1500
Senjahopen

Zooming in on the site of housing, I have formulated a question that I would like to work around:

How can a housing community for tourists and seasonal workers act as a hub in the local community?

I have looked at the three main actors of the society: The municipality, the fishing industry and the tourists.
- Their interests
- Their use in the society today
- And finally their possible needs for the future:

• Need of housing for ca 40 seasonal workers during wintertime
• A place to sell fish and local products to tourists
• Need of housing in smaller scale for tourists during summertime
• Local functions/facilities that can be used by the whole society such as a sauna, shed for skis and sport fishing preparations and café and information hub
How can a housing community for tourists and seasonal workers act as a hub in the local community?

<table>
<thead>
<tr>
<th>The municipality</th>
<th>The fishing industry</th>
<th>The tourists</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interests</strong></td>
<td></td>
<td>Private initiative?</td>
</tr>
<tr>
<td>- Cater for housing for everyone</td>
<td>- Cater for housing for seasonal workers</td>
<td>- Cater for housing for the tourists</td>
</tr>
<tr>
<td>- Cater for jobs</td>
<td>- Sell their products</td>
<td>- Experience the norwegian societies</td>
</tr>
<tr>
<td>- Integration</td>
<td>- Keep being the biggest employer in the region</td>
<td>- Be close to the nature</td>
</tr>
<tr>
<td>- Economical effectivity</td>
<td>- Export the fish</td>
<td>- Use/buy local products</td>
</tr>
<tr>
<td>- Functioning infrastructure</td>
<td>- Protect the local environment</td>
<td>- Be with others</td>
</tr>
<tr>
<td>- Keep the region interesting for tourists</td>
<td>- (brochure from Nergårds AS)</td>
<td>- Experience local culture and living</td>
</tr>
<tr>
<td>- Cater for young people to stay in the region</td>
<td>- Offer the workers a nice society and workplace</td>
<td>- Experience the northern lights</td>
</tr>
<tr>
<td>- Keep the region’s character</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Today’s use**

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<table>
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<tr>
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</thead>
<tbody>
<tr>
<td>- The retired men in the society are meeting at the local food store each day to drink coffee</td>
<td>- Sport fishing amongst seasonal workers is common</td>
<td>- Sport fishing</td>
</tr>
<tr>
<td>- Local initiatives in the sports hall to the school are used by locals and also seasonal workers</td>
<td>- Seasonal workers often use local functions such as gym, pool etc</td>
<td>- Water safari</td>
</tr>
<tr>
<td>- There is a training centre where people meet</td>
<td>- Hiking</td>
<td>- Northern light spotting</td>
</tr>
<tr>
<td></td>
<td>- They are integrated in that sense that they use local facilities</td>
<td>- Hiking - alone feeling is important</td>
</tr>
<tr>
<td></td>
<td>- Today the seasonal workers are offered bigger units, like 3 rooms but the only use 1-2 rooms. Smaller units are required.</td>
<td>- Often buys package trips with where nature experiences are important</td>
</tr>
</tbody>
</table>

**Needs**

- Need of housing for 40 seasonal workers
- A place to sell fish and local products to tourists
- Need of housing in a smaller scale for ca 40 tourists
- Information centre and café for activities etc
- A movement from the housing area to the quay through the society for example a fish market
- Local functions/facilities that can be used by the whole society such as sauna, skiing shed for waxing, a shed for preparing and keep the fish from the sport fishing, café/pub
- Get the seasonal workers to engage in the local society since they stay long periods and come back year after year
Program

A solution to keep these functions at the same place would be to make a communal or collective cluster. This is concluded in the following program.

To continue with the design process I put up some guidelines and principles. (Further down in the presentation)

The program is developed from the needs that the society has and my interest and idea of creating a communal cluster and facilities for the whole society.
Guidelines & principles

Create a cluster of collective units who share communal areas and shaped in a half circle

Adapts to the natural conditions, such as height curves and the natural stream and faced to the northern lights

Be humble and respect the small scale of the housing surrounding and not exploit the existing society

The sitka pine tree is growing at many places in the north of Norway. It can be used as a facade material

There is a lot of natural stone on Senja. Such as Granite and Granodiorite. There are some gravel pits and there are plans to create more. It could be used to the ground
References

In search of relevant references, I three different ones that have informed me during the process of the project.

- Skaparlyn, by Ralph Erskine
- Local house on Senja, by unknown
- The Sea Ranch, Charles Moore
Natural conditions

In general there is not much sun in the north of Norway during the winter. It disappears in November and comes back in February. On the other hand in the summer time, there is sun all over the day and night. Looking at the natural conditions for the village of Senjahopen, regarding the sun it is like other places in the north: a lack of sunlight. When the sun comes back on the contrary, there are moments when the mountains are shading the sun.

Regarding the wind conditions, the wind is not affecting the village that much. Since the mountains are protecting.
Sketching in models

Sketching by hand
Sketching

Sketching in site model 1:500
Sketching of different solutions and possible forms of the cluster. Looking at the existing way of developing these villages.

Forms connected to each other in relation to the references.
Strategy of planning

Looking at how this and many other societies in the region has been developed, there are at first houses along the coastline. And later additions have been made higher up on the island perpendicular to the sea where the road has been extended until there is a new house. This way of continuing the local tradition of developing the society has led me to different solutions as you can see in the process. Which finally led me to this solution where the road ends in a dense cluster, but could in a later phase continue and make another turn, just as the existing village is doing today. Like that you can see this as a phase 1.

Facing the northern lights and the nicest view over the inlet of Senjahopen, are the two housing units, which consists of a spine of communal areas, which are shared within the house. From this form the private units are attached. The other side of the road communal houses for the whole society are placed, a café and information hub and a building for fishing preparations and drying. In continuation the area opens up to the nature and then facing the mountain behind and the nature, is the sauna and the ski lodge which are also communal houses.
Regarding the material, it is constructed in wood, where there are several possibilities of the facade material. There is a pine tree that was planted in the sixties, but the quality is not that good for construction, so it is used for wood pulp for paper. But maybe this can be treated with ferric sulphate (järnvitriol) to be resistant. Otherwise larch or cedar wood to get the grey/silver expression.
Strategy of layout

Looking at the housing units, they are structured with a communal spine which contains the kitchen, living room and spaces to hang out in. The communal spine is in an A-shape inspired by the local fish drying structures in the north of Norway.

Attached to the spine are the private units of sleeping rooms and wc, bathroom etc. These are developed from the sketch models of the form development in the site model in scale 1:500.

The private units are facing the northern lights, so that in the bedrooms they can see how the northern lights are dancing on the sky.

The communal areas are indicated in yellow in all the drawings.
Elevation north original scale 1:100
Elevation south original scale 1:100
Interior perspective
Interior perspective
Model 1:500
Winter time