



CO-FOOD HJO

A Community Food Center

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INTRODUCTION

This is a project within the design studio Planning and Design for Sustainable Development in a Local Context, developed during the autumn semester 2016/2017 at Chalmers University of Technology. The studio has been divided in three parts:

Part A focused on understanding and analyzing the local situation.

Part B contained work on planning and design projects that can support the objectives and strategies developed in part A.

Part C focused on communicate the outcomes of the studio on site for local stakeholders and inhabitants.

This booklet includes conclusions from Part A and the project "Co-Food-Hjo", a food community center, done in part B.

AIM AND CONTENT

The purpose with this project is to investigate the possibilities to distribute locally produced food, by making it more visible and accessible for people in Hjo. The aim is to suggest one way of decreasing the distance between food producers and consumers. This project is aiming to design a comprehensive vision of how this could be implemented on the municipality scale, which will be a ground-base for ,the focus project, the food node in Hjo town. But what does this node offer when it is not a food market? How could this node be a public space that people visit not only to shop their food? This project is considering to design a schedule of activities that are supporting and closing the food chain loop, from producers to consumers and back again.

RESEARCH QUESTION

How can we as architects and planners increase the accessibility of locally produced food in Hjo?

METHODS

- Interviews with: local food producers (farmers), associations within the food production/distribution/selling, municipal officials relating to fields of environment and agriculture and commercial
- A survey for the inhabitants of Hjo
- Observations and field trips.
- Literature studies within the field of food production, distribution and consumption.

SWOT-ANALYSIS

Cultural heritage: Natural, built heritage, agricultural heritage

Proximity (physical)

Human scale and picturesque

Community: Social capital, social trust, social spaces

Local resources

Closeness to nature (physical and mental)

STRENGTHS

Lack of diversity

Lack of access

Disconnection: Improperly defined and disconnected public spaces

Car dependency and car usage

Low resilience

Dependency of seasonal tourism

Sleeping city: daily, seasonal

No municipal housing company

Community: Social control

Demographic unbalance

High ecological footprint

WEAKNESSES

OPPORTUNITIES

Growing interest in local resources

Growing interest in eco-tourism

Increased environmental awareness

Immigration and multiculturalism

Increase in sharing economies

Slow city trend / Ruralisation

New technologies

THREATS

Aging population

Urban sprawl on agricultural land

Climate change

Urbanization: centralization of services within Hjo and in the region

Individualization: decreasing community engagement

Globalization: external dependency makes Hjo less resilient

Disruptive technologies

Xenophobia

Unsustainable lifestyles

Unsustainable agricultural and forestry practices

Water pollution of lake Vättern

Diminishing global resources / Peak everything

OBJECTIVES

This project is addressing following objectives:

- By the year 2025 usage and consumption of local resources is greater than the dependency of imported goods.
- By 2025 there are cultural and social activities all year round for inhabitants and visitors in Hjo, regardless of age and social group.
- New urban developments in Hjo is achieved by inner additions in a human scale rather than building on fertile land.
- By 2030, 80% of food consumed in Hjo is organically and locally produced within the Skaraborg region.
- In Hjo urban and rural areas are well connected.
- Hjo Inhabitants have awareness of sustainable lifestyles and has an ecological footprint below one.

STRATEGIES

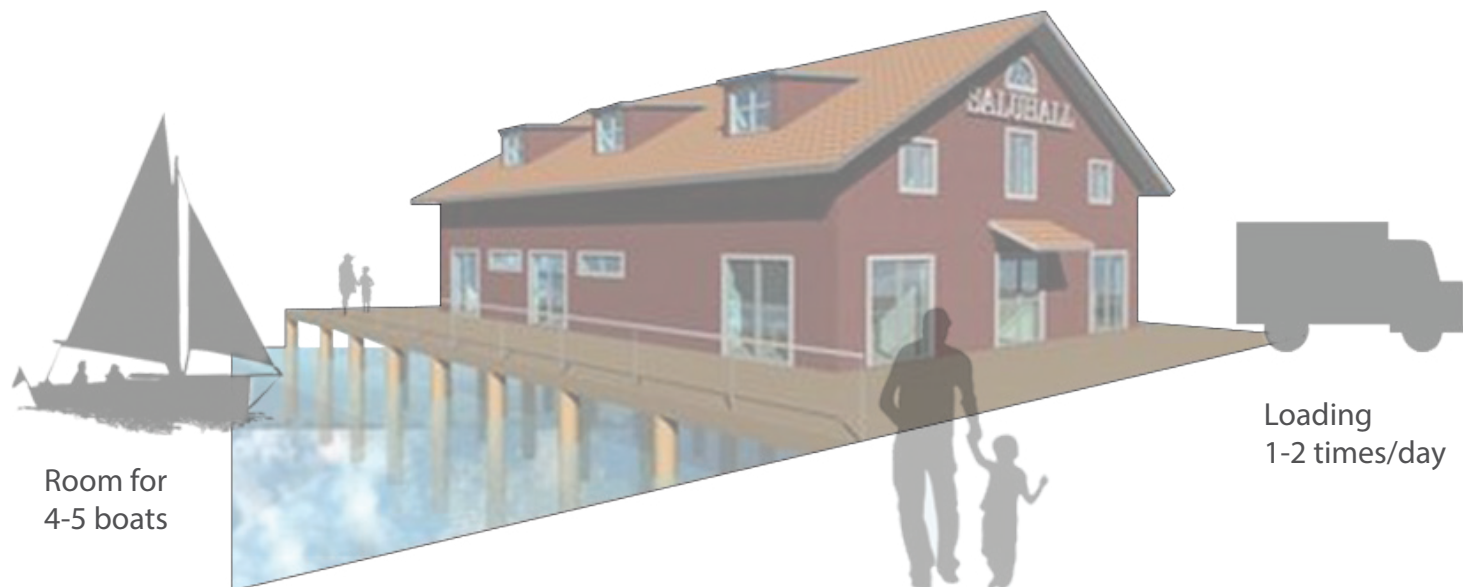
This project is addressing following strategies:

- Promote the production and distribution of local and organic food.
 - Strengthen the network of actors related to production and consumption of local food.*
 - Support and encourage food markets in urban centres.*
- Strengthen the physical and mental connection between urban and rural.
- Support and help out with local initiatives.
- Activate the shared spaces throughout the year.

HJO SALUHALL PROJECT

FOOD MARKET PROPOSAL

The starting point for our research was the idea of having a local food market in Hjo which led us to the previous project "Hjo Saluhall". The association "Hjo Saluhall Ideella Förening" aimed to make local food more accessible in Hjo. They established a network of 15 food producers and contracted restaurants, grocery stores and one butcher. Then they proposed a food market in the harbour area that mainly was aimed to be a transfer zone of local food to their customers in the region. These plans were neglected by the politicians, since they did not believe it fulfilled the required harbour purposes (Hermansson, 2016). They were also concerned about the traffic load and the risk that the building could be privatized if the business did not work (Mustajärvi, 2016). The association fell apart since they did not believe that their business plan could work in another location (Hermansson, 2016).



Room for
4-5 boats

Loading
1-2 times/day

*Architect Dan Johansson
(P4 Skaraborg, 2009)*

PROPOSED FUNCTIONS



Food hub & market



Guest harbour services



Public pier around



Tourist information

HJO SALUHALL PROJECT

Costumers

200 km

FINANCIAL PLAN

15% On site

85% Transfer

(Hermansson, 2016)

DISSOLVED NETWORK

Each former member of the association has continue to develop their own businesses.

(Mustajärvi, 2016)

WHERE TO FIND THE MISSING ENTREPRENUER?

The interest of starting a local food market in Hjo seems to still exist. For instance, there is one local farmer that have this idea of locating it close to the attraction point of Hem & Hobby.

(Hermansson, 2016)

MAIN REASONS

- Swedish "jantelagen"
- Harbour purposes
- Traffic load
- Could be privatized

95% Citizens

50% Politicians

(Hermansson, 2016; Mustajärvi, 2016)

60 ACTORS ATTENDED

- Begin in small scale
- Efficient marketing and collaboration between actors are crucial
- An entrepreneur that want to start up and manage a food market is missing

(Ingsten, 2014)



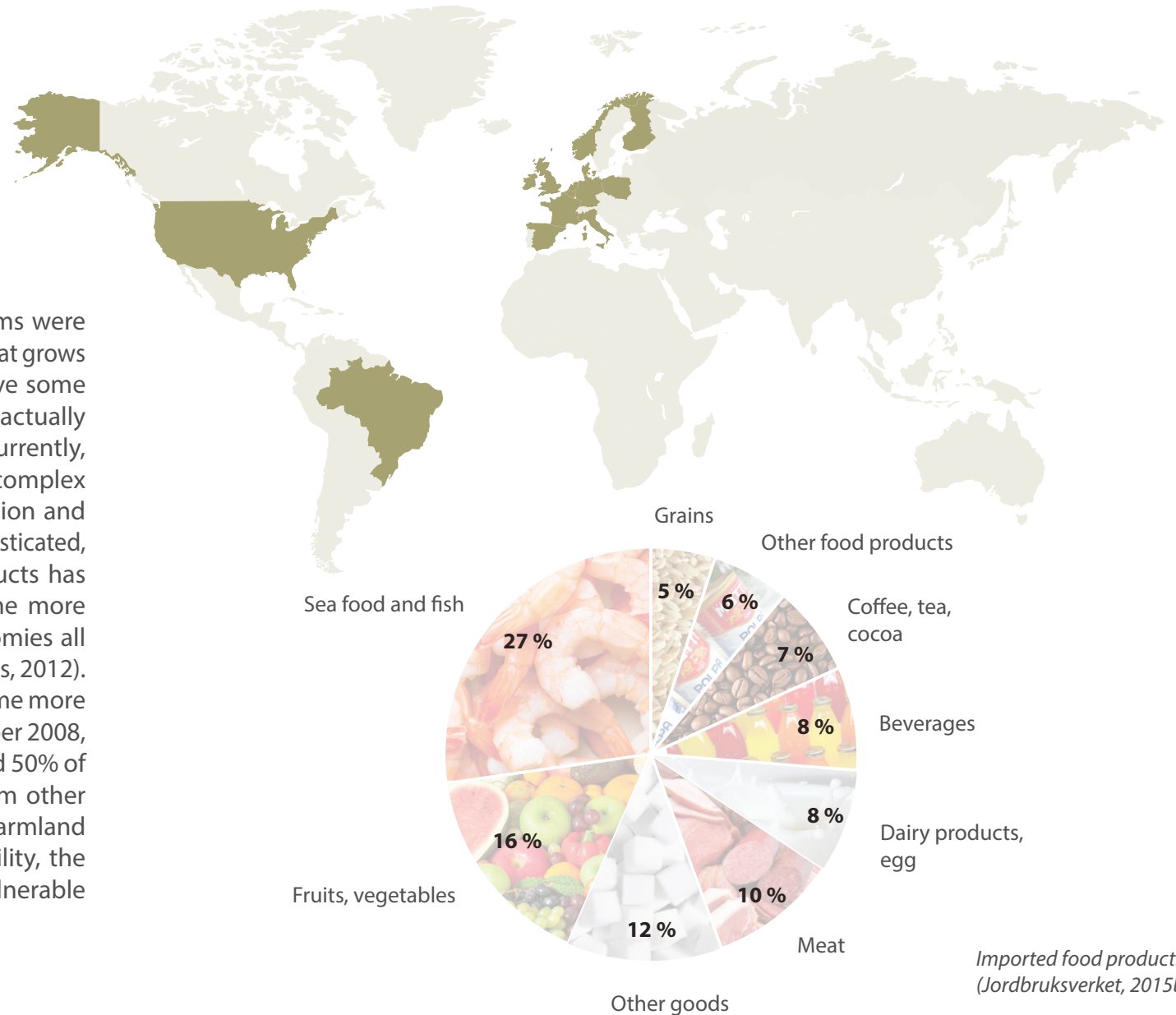
BACKGROUND // **FOOD SYSTEMS**

FOOD SYSTEM

Sweden import most agricultural goods and food products from these 14 countries (Jordbruksverket, 2015b)

FROM LOCAL TO GLOBAL

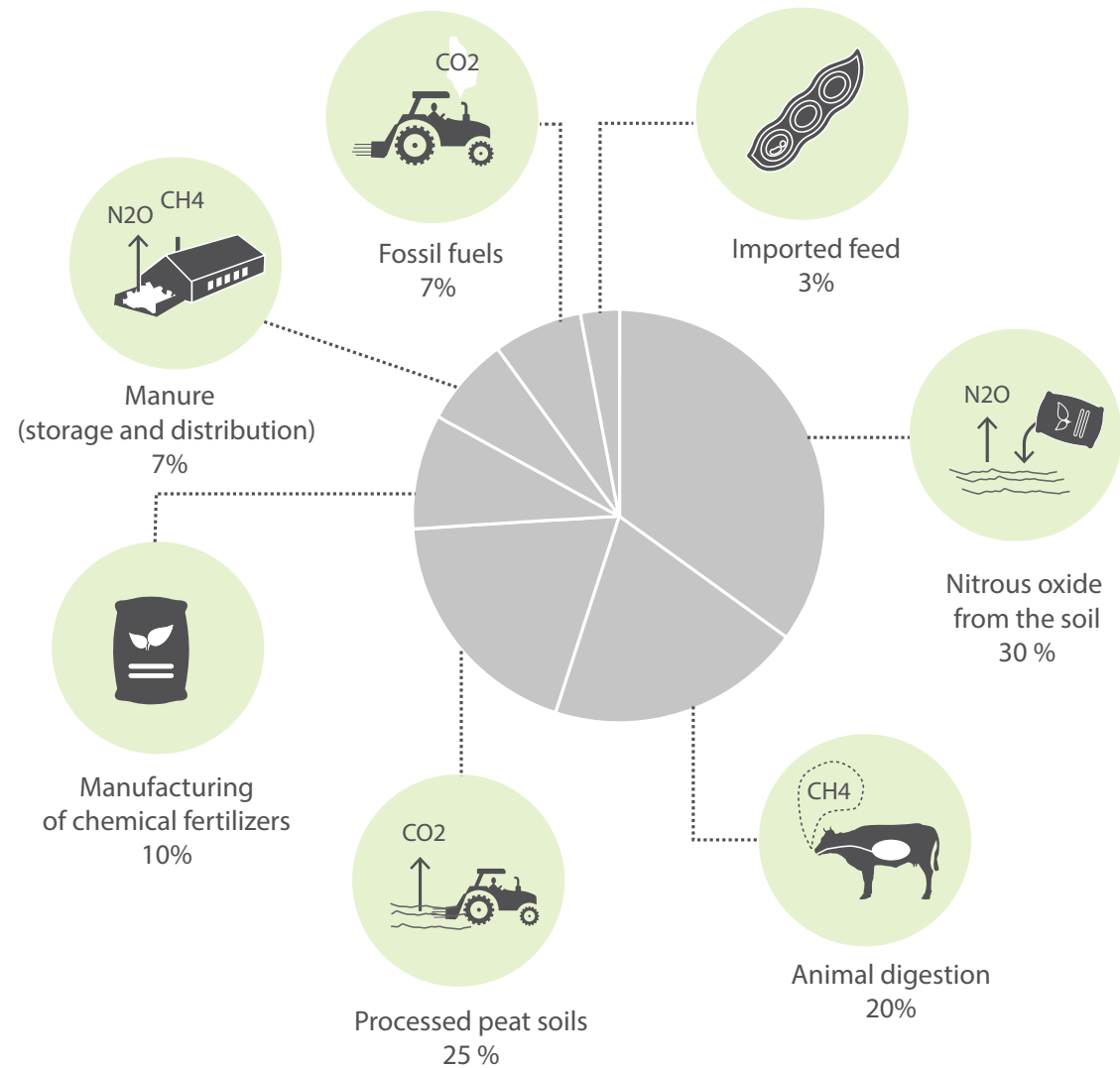
Before the Second World War, food systems were more resilient, where food was something that grows near where you live, by someone you have some kind of a relationship with, and that you actually cook yourself. (Tamzin P. & Rob H., 2009). Currently, modern food systems operate within a complex multinational landscape. As food production and storage techniques have become more sophisticated, and yearlong demand for seasonal products has increased, our food systems have become more globalized, connecting people and economies all over the world. (The national league of cities, 2012). Instead of a local hinterland we have become more dependent on the global hinterland (Webber 2008, see Barrs et al, 2010, p.24). Between 45 and 50% of all the food we consume is imported from other parts of the world. And as more and more farmland is closed down because of poor profitability, the Swedish food supply has become very vulnerable (Agö 2012, see Svensson, 2014, p.4).



Imported food products (Jordbruksverket, 2015b)

ENVIRONMENTAL IMPACTS

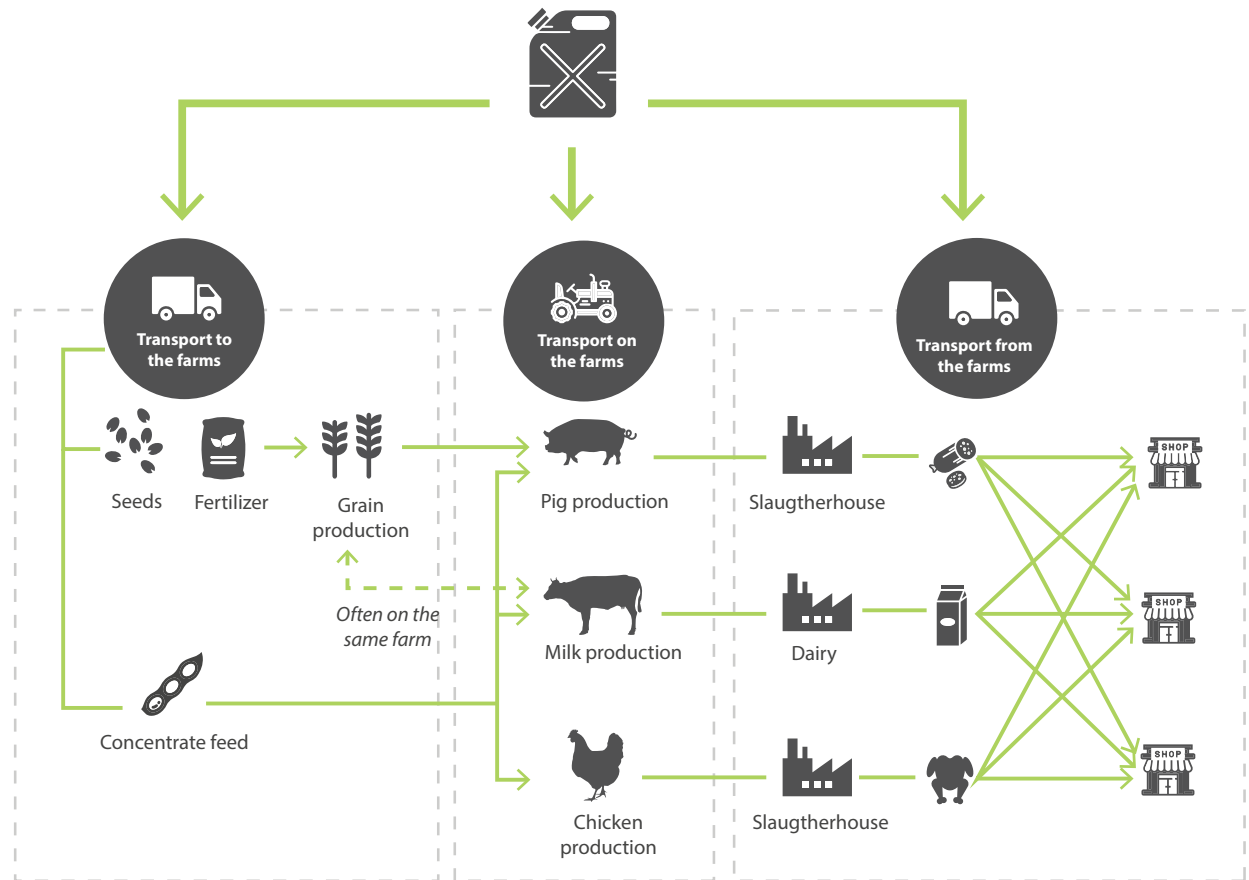
The agricultural sector is, right after road transport, the second largest emitter of greenhouse gases (GHG) in Sweden (Jordbruksverket 2011). One of the reasons is the use of fossil fuel for tractors and transport, drying grain and manufacturing of fertilizers that emits carbon dioxide (CO₂). But these impacts are relatively small compared to the creation of other greenhouse gases methane (CH₄) and nitrous oxide (N₂O), that has larger effect on the climate than carbon dioxide. Methane is created by ruminants (cattle and sheep) when digesting the cellulose in the feed. Nitrous oxide is formed in the soil by biological processes and the usage of fertilizers, crop residues and manure increases these processes (Röös, 2012, p. 12,30).



(Jordbruksverket, 2011)

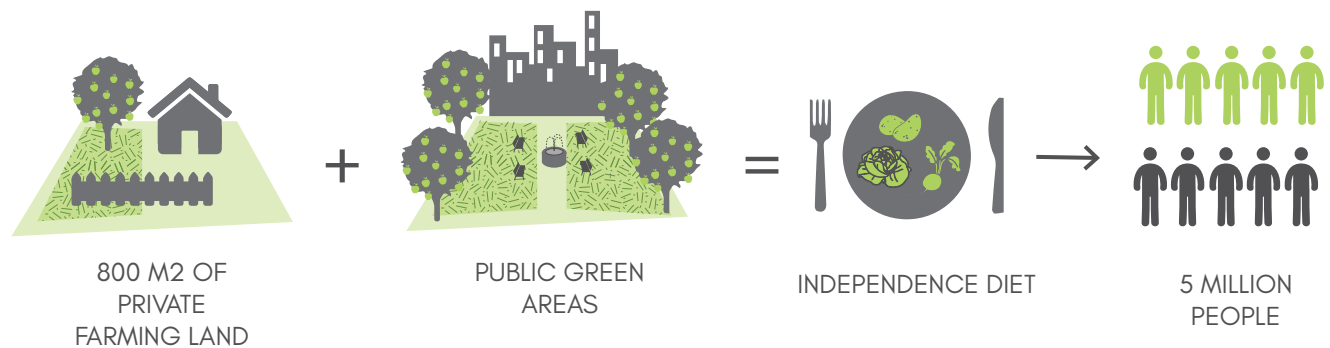
FOOD SUPPLY

A vulnerable variable for the food supply is the dependency of oil - both for producing and distributing food. In their study Eriksson et al has estimated the vulnerability of the food supply in Sweden in times of crisis, whereat lack of diesel is one of the scenarios. The study shows that the farms is depending on diesel for running their production, transports to the farms (feeds, fertilizers, seeds) and transports to distribute the products via slaughterhouses and dairies to the shops. The interdependensy between different food producers is also vulnerable in times of an oil blockade. And if they experience it many of the producers cannot adopt to other fuel alternatives fast enough (Eriksson, 2016).

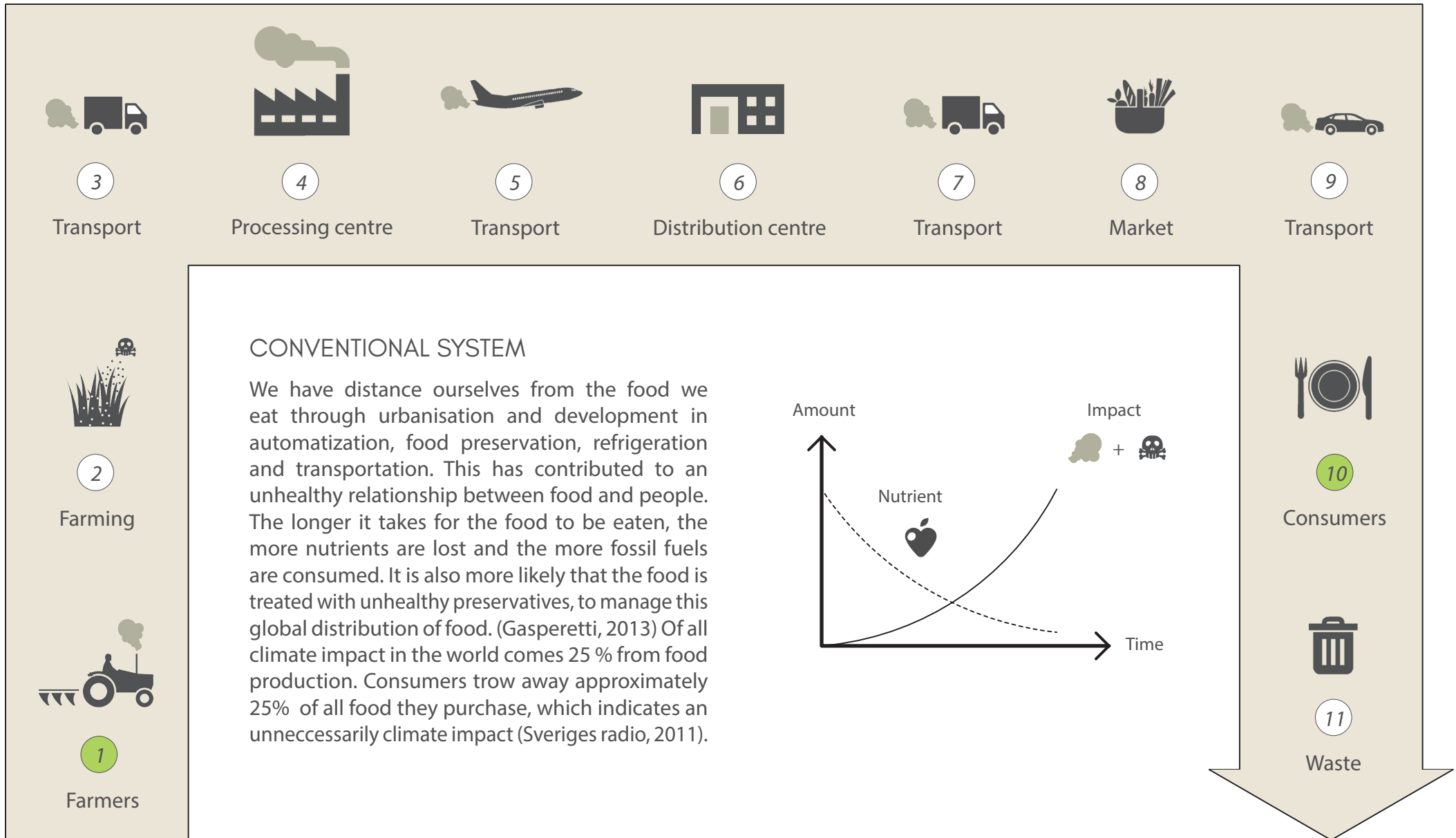


DIVERSIFYING THE FOOD SUPPLY

Communities that are self-sufficient can better provide for their own essential needs. They will reduce their vulnerability to crisis of others, over which they have little or no control. To be completely self-sufficient and separated from its surrounding is not realistic and desirable in our global economy. But one way of increasing the current resilience and diversify the food supply is by urban and domestic farming. In a research from SLU in 2008 it has been shown that the estimated area for producing food for one adult on a vegan diet for one year is only 800 m². This study has based the estimation of the "Independence diet", that consists of 7 crops - potatoes, broad beans, carrots, parsnips, cabbage, onions and apples. These crops are ones that is easily grown in a regular villa garden or allotment garden. If all the private gardens and allotments gardens in Sweden were used for growing these crops, it could supply around 4 million people in Sweden. And if other green areas, like parks, could supply 5 million adult people. (Andersson et al., 2008, p. 2,13).



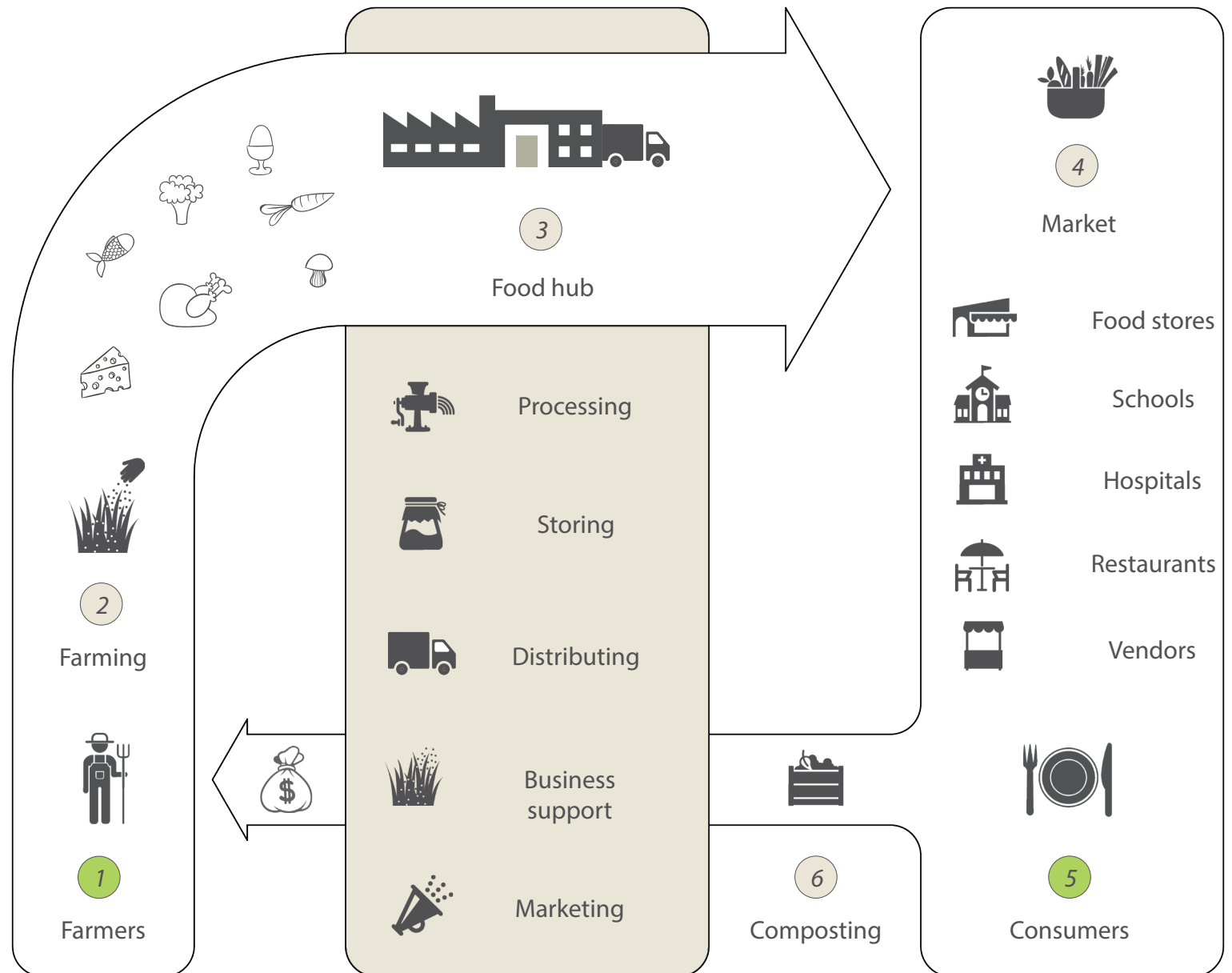
FOOD DISTRIBUTION



FOOD DISTRIBUTION

FOOD HUB MOVEMENT

A food hub provides shared space, equipment, licensure, knowledge and resources for processing, storing, distributing and marketing of local food. It works as a drop off point for multiple farmers and a pick up point for distributors. From here is local food distributed directly to schools, hospitals, restaurants, markets and grocery stores. In this way are the amount of middlemen reduced and small farmers can together fill fewer but larger orders. The food hub takes care of getting the food to consumers and support the farmers to develop their business of producing food. This is an efficient way of distributing food that saves time, gas and money for both farmers and consumers. It creates new job opportunities, encourage local farmers to collaborate and give people more access to nutritious local food. (Gasperetti, 2013)



WHY LOCAL FOOD?

“Not only is our entire agricultural and food system based upon the availability of cheap fossil fuels – we do not even use them in a wise and frugal manner. We squander them on flagrant consumerism in order to maximise short-term profit, while destroying the localised systems that once sustained our culture.”

Dale Allen Pfeiffer

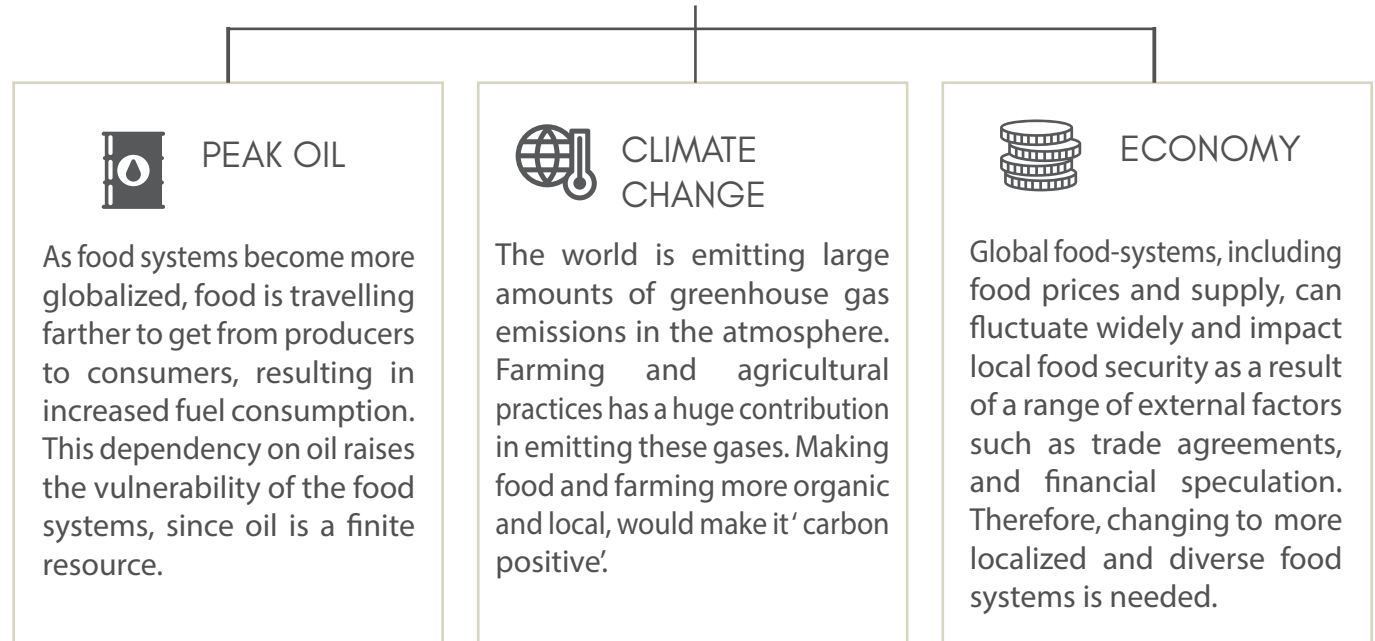
HOW FAR IS “LOCAL” FOOD?

Local areas that support the food needs within a region are variable depending on geographical features, different seasons, what products are available, and how much of non-local produce is accepted. For the case Co-Food Hjo, local food is the food from Hjo municipality.

EXAMPLES OF ACTIVITIES THAT SUPPORT LOCAL, SUSTAINABLE FOOD SYSTEMS:

Farmers markets, community gardens, regional food hubs, farm-to-school programs, food policy and/or food security councils, food waste collection and compost programs etc.

WHY CHANGE TO LOCAL FOOD SYSTEM IS INEVITABLE?



A LOCAL, SUSTAINABLE FOOD SYSTEM IS ONE THAT:

- Ensures that all residents have access to healthy, affordable food options.
- Minimizes the environmental impact of food production and transport.
- Facilitates and encourages local food production and processing.
- Creates local jobs that provide fair working conditions and a living wage.
- Benefits local economies by supporting local food producers, retailers and businesses;
- Maximizes resources through collection and reuse of food waste and other food related byproducts. (The national league of cities, 2012)

LOCAL SITUATION // **HJO**

HJO MUNICIPALITY

NATURAL CONDITIONS

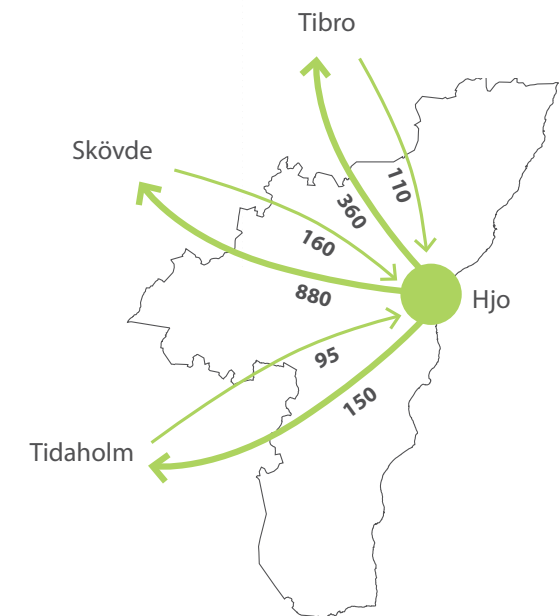
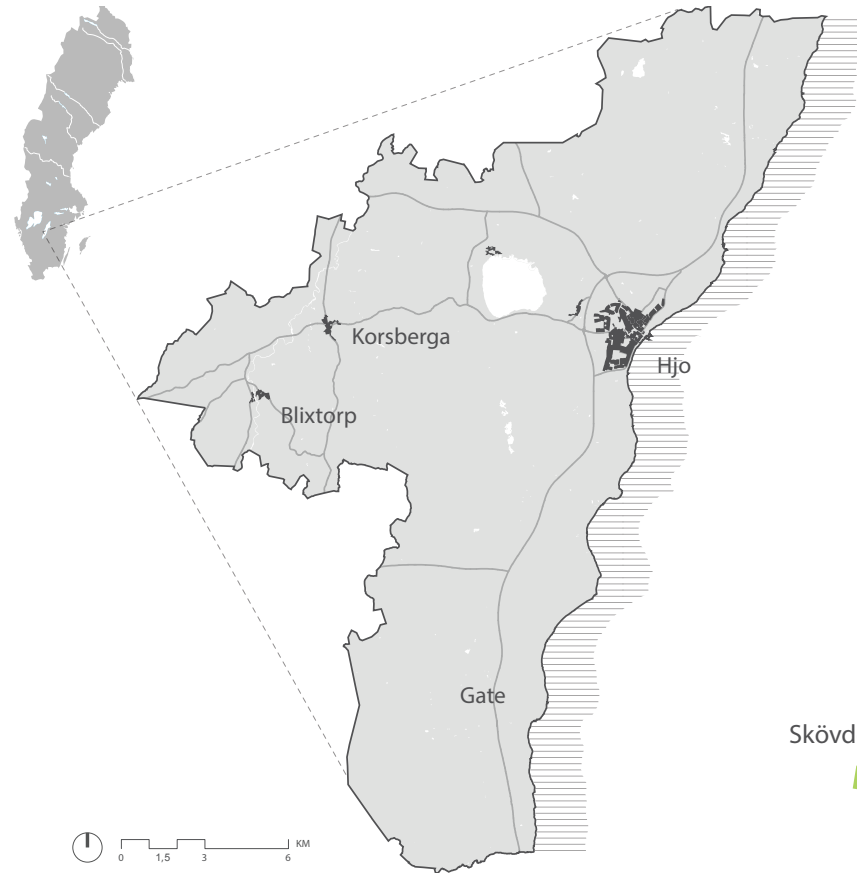
The fertile boulder clays around lake Vättern and the areas west of Hökenås and around Mullsjön creates good conditions for the agricultural production within the municipality. Of the 10 000 ha of farm land, 44 percent is arable land (4400 ha). The main agricultural production is concentrated on cereals, followed by forage, oilseeds and potatoes (Hjo kommun, 2010).

EMPLOYMENT

The job opportunities and employment rate within the basic sectors (agriculture, forestry and fishing) plays an important roles for the business climate in the municipality of Hjo and for the preservation of its natural and cultural values. Today, there are instead more service and knowledge oriented companies. These companies can have flexible locations but looking for access to people with specialized competence, which in turn looking for good living conditions with a range of cultural activities (Hjo kommun, 2010).

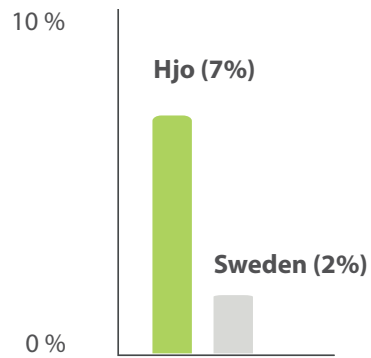
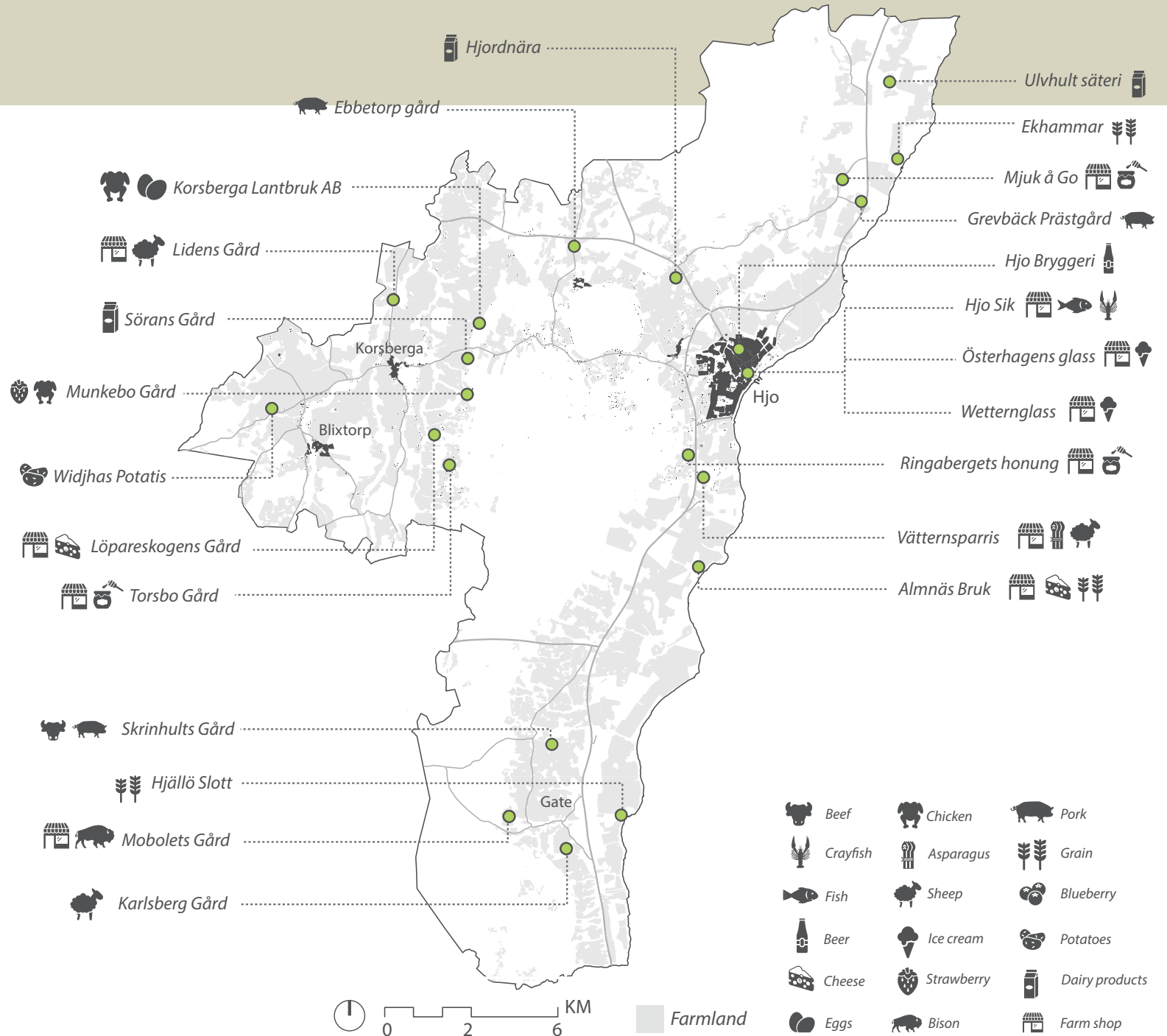
COMMUTING

The residents of Hjo are commuting more than any other city in the region. Approximately 1800 citizens are commuting out from Hjo, while 600 are commuting in to Hjo and 2500 within Hjo municipality (Hjo kommun, 2010). These trips are mainly by private cars, since the public transportation is not enough to be favored by the inhabitants. The buses are mainly adapted to school and working hours (SCB, 2014).



FOOD PRODUCERS

Employment within agriculture, forestry and commercial fishing is more than Sweden in general. (Svenskt Näringsliv, 2016). Almost a third of the producers has other income sources besides the agricultural production (Hjo kommun, 2010).

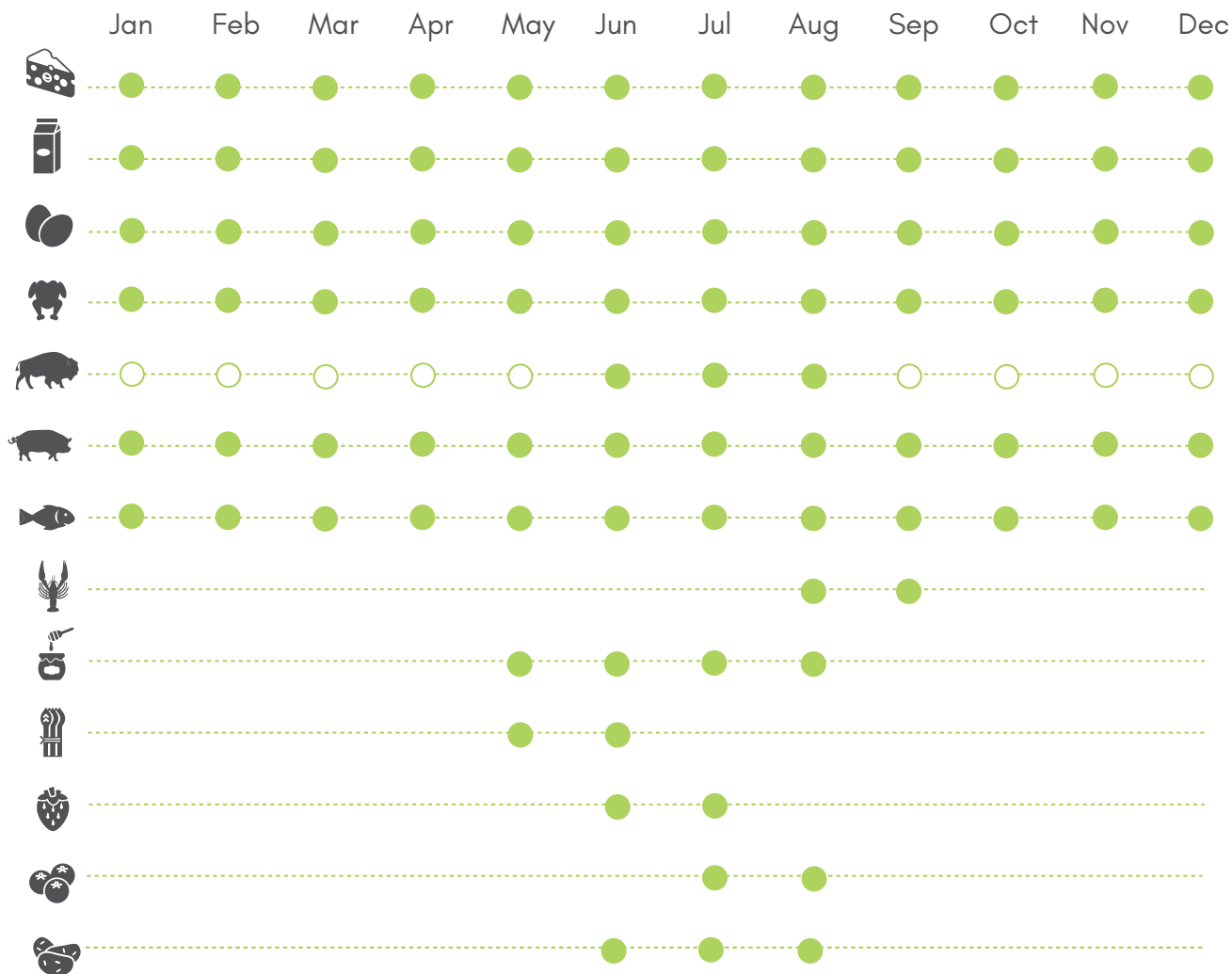


Employment within agriculture, forestry and commercial fishing in Hjo 2014 (Svenskt Näringsliv, 2016).

SEASONAL CALENDER

AVAILABLE FOOD PRODUCTS DURING THE YEAR

This diagram shows during what seasons different food products in the municipality are available. (It doesn't take in consideration the ability to store fresh products during the rest of the year). The animal products (diary products, eggs, chicken, pork and fish) are available during the whole year. The bison products is available at the farm shop during 28 jun-15 aug (during other periods it's possible to order from the owners) (Bisonfarmen i Gate, 2016). Fresh vegetables (like the asparagus, the berries) are only available during the summer months. The restricted fishing for crayfish in Vättern impacts the availability of crayfish in Hjo. Permissions are needed for commercial fishing the whole year around and private crayfishing is only allowed during the period - the second Friday in August to the second Sunday in September (Havs- och vattenmyndigheten, 2014).



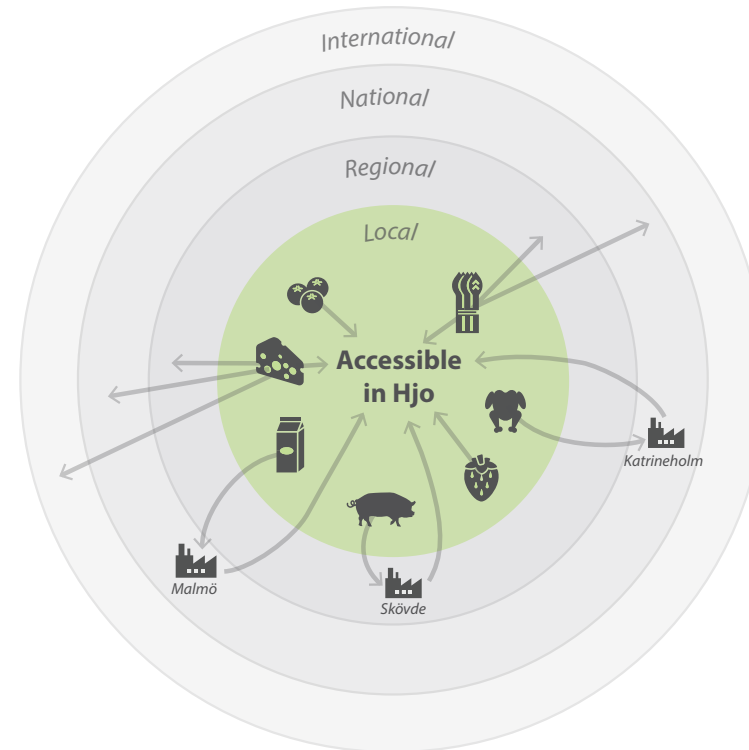
DISTRIBUTION

NATIONAL AND INTERNATIONAL

The distribution chains of the locally products differs and is closely connected to the scale of the production, target markets and the cooperation with larger food companies. Producers connected to national food companies mentions already existing networks and cooperations as factors that makes it hard for them to distribute locally. Hjordnära dairy that from the beginning started as local dairy of organic milk products is now a part of Skånemejeriet. They have daily transports of locally produced milk and dairy products to cooperate dairy plants in Malmö and Kristianstad. And from there the products are distributed nationally - and back to Hjo. The same goes with the chickens that is produced on Munkebo Gård. Companies, like Almnäs Bruk, mentions the importance of finding niche markets outside Hjo. 50% of their cheese is sold to customers abroad, 25-30% to Stockholm, 15% to the regions of Gothenburg and Malmö and 2% is sold in their own farm shop two days a week. Their only distribution locally is through their own farm shop (open two days a week) and to Känsla Café and Brasserie in Hjo.

LOCAL FARM SHOPS

Others are selling their products on the farms, through farm shops. This is for example the case at Vätternsparris. During the harvest season visitors are able to visit the farm and buy asparagus in the farm shop. The farm has a existing regional and national



network of customers consisting of restaurants and grossistes and larger food companies. Other, like Munkebo Gård and Blåbärgården, allows people to visit the farms during the harvest seasons to pick their own products (strawberries and blueberries). Alexander at the Blåbärgården mention that one of his business strategies is to give the visitors a wider experience than just consume in order to compete with other blueberry companies nationally. This by for example offering accommodation and letting

people eat during the picking of the blueberries. On Mobolets Gård they also arrange events and offers accommodation, bison safari and to eat at the farm restaurant.

OTHER CHANNELS

As a complementary selling channel some of the farms also use the internet to enable customers to order their products directly from the producer.

SELF-SUFFICIENCY

CONSUMPTION

Research show that what we eat has greater impact on the environment than how long the food has been transported (Webber 2008, see Barrs et al 2010, p.24). Eating beef and lamb impacts the climate more than eating pigs and chicken. One kg of beef produces 23-39 kg of GHG, one kg of lamb 13-22 kg GHG, chicken (2-3 kg GHG) (Livsmedelsverket 2016). The meat consumption has increased from 1960 to 2013 with 70 %. In 2010 the average Swede ate 86,4 kg meat / year and 18,4 kg chicken / year (Jordbruksverket, 2016, p.29).

COULD HJO BE SELF-SUFFICIENT ON FOOD?

In October 2016 the number of inhabitants of Hjo reached 9052 persons (Hjo kommun, 2016). If they all were on a vegan diet, in line with the SLU estimation, they would need 724 ha of farm land- an area as big as Hjo town. Hjo has already large areas of arable land that could provide food for this a local food supply purpose. If the local food supply would be more diverse, and the inhabitants went from being food consumers into being food producers, it will be complementary to the already existing food production to achieve more self-sufficiency on food.

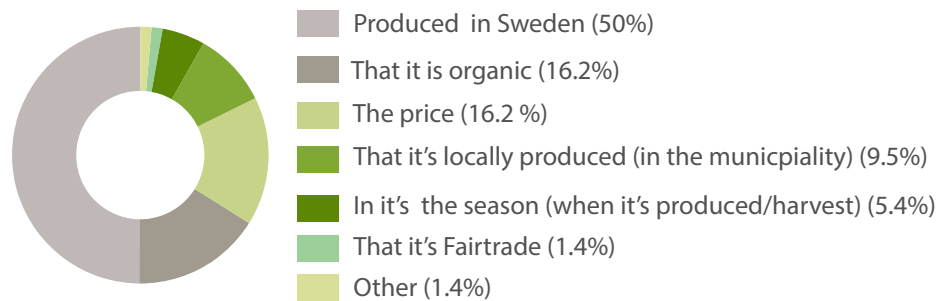


CONSUMPTION AND ATTITUDES

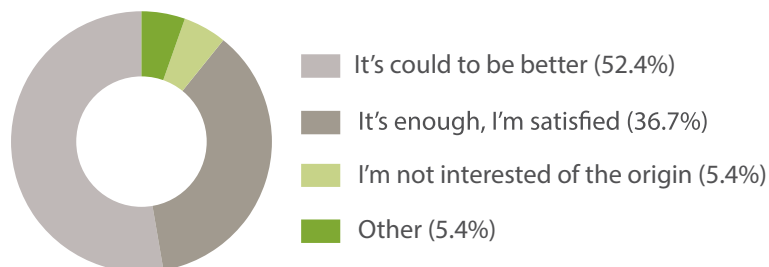
SURVEY

A survey focusing on the food culture in Hjo municipality, was published the 17th november 2016 on Hjo group on Facebook, with 17 questions. Mainly, to know more about the availability, consumption habits and interest in local food. 74 people responded to the survey. And here is a sample of the survey.

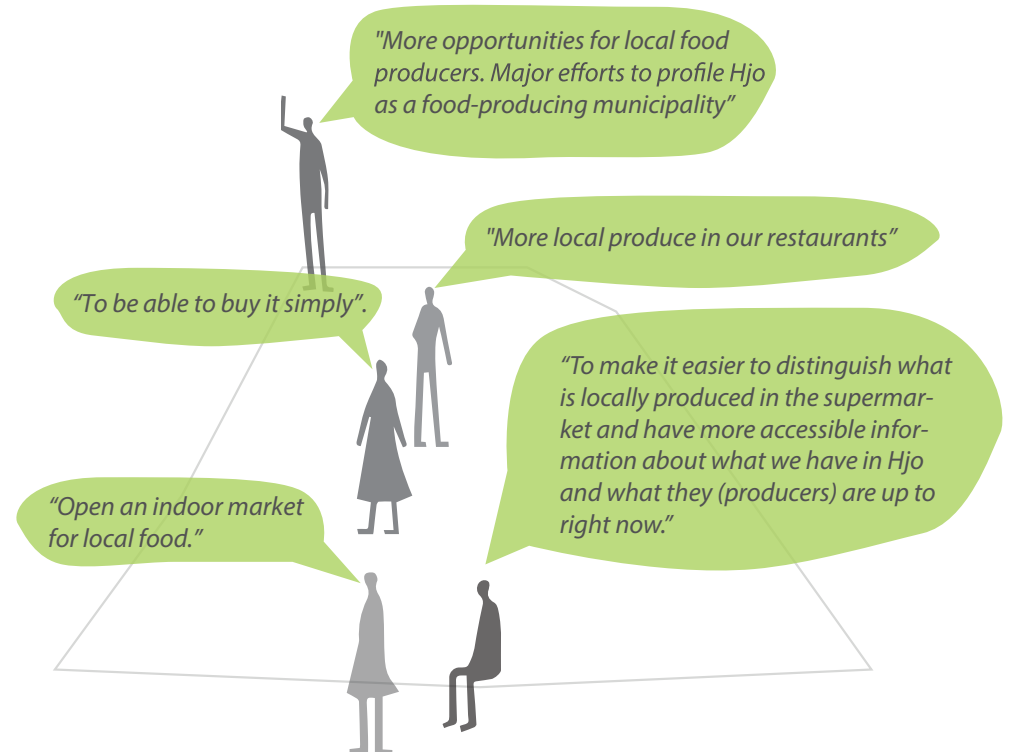
What is the *most* important aspect when buying food products?



How do you perceive the supply of locally produced food in the shops in Hjo today?



What do you think can be improved to increase the supply of locally produced food?

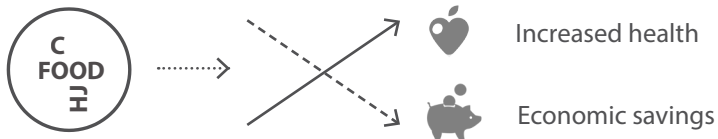


VISION // **CO-FOOD HJO**

VISION

CYCLIC LOCAL FOOD CHAIN

Co-Food-Hjo aims to increase the interest of local food by making it more accessible. This can make Hjo more resilient and less dependent on external food. It can also contribute towards reduced ecological footprint and improved health of the local community and economy. The project consist of a comprehensive food network that promotes interaction between producers and consumers. This network encourage the actors to exchange knowledge, services and resources in order for innovations to happen. The project aims to inspire local entrepreneurs to start-up new food chain businesses. It fosters a meaningful, productive and educational relationship to food, by attracting people closer to its source. The project strives to strengthen the sense of belonging by addressing the performative and socializing factors of the food chain, which contributes to lower costs in society.

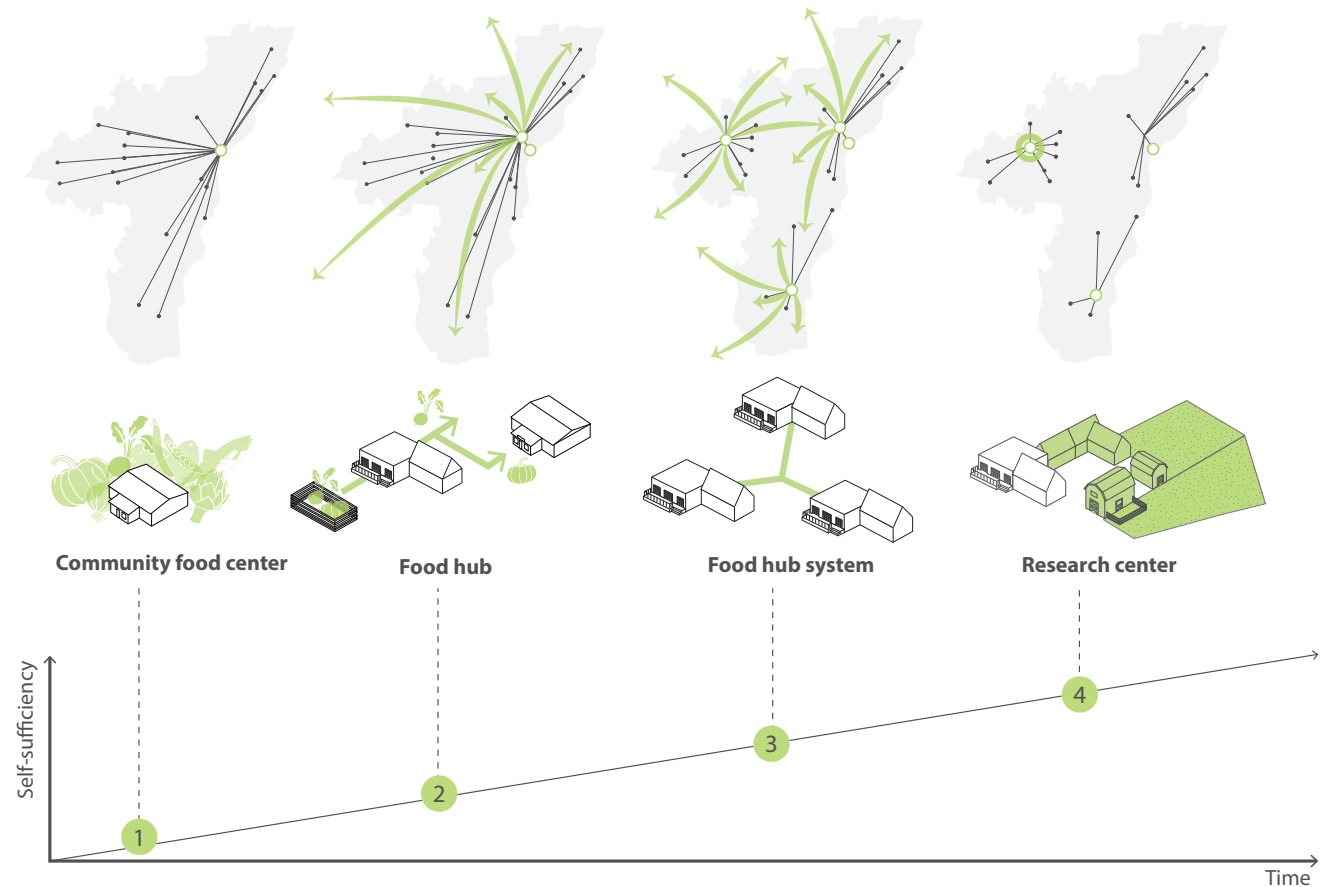


COMPREHENSIVE STRATEGY

To embody the vision, a comprehensive proposal has been developed, based on four implementation steps.

STEP 1: A COMMUNITY FOOD CENTER

The first step in the transformation of making Hjo a more self-sufficient municipality on food is by providing a small-scaled food distribution in the town center. The transport from the food producers to the community food center is done by combining commuting with food transport through an interactive mobile application. Commuters will be informed by the app when food products are ready to be delivered from the farms. Commuters then pick up the food on their way to or from work by car and deliver it to the community food center. In addition to food distribution the aim is to create a platform for interaction between people and for recreational, educational and social food-related activities (e.g. study circles, a community kitchen, urban farming, workshops, cooking classes). This can have inspirational effects for people to start farming in their own gardens and sell the surplus to the food center. And school yard farming has a unique position to spread knowledge about appropriate practices in food production. Another function of the community food center is the offering of working space for co-workers. Commuting is an important aspect for the future development of Hjo, and the community food center can enable people to work locally in Hjo with their headquarters elsewhere.



They can during their workday take part in the activities (e.g. farming) to release the stress levels or access good and healthy food cooked by the people engaged in the community kitchen. In the long term, bringing co-workers together can create a platform for interaction between different professions and in the future inspire new freelancing entrepreneurs and local students to interact and develop Hjo's food production, distribution and consumption. Relevant actors to get involved in the project, in addition Hjo's food producers, are Hjo Municipality, local folklore societies (hembygdsföreningar), The Entrepreneurial Centrum (Nyföretagarcentrum), The Swedish National Pensioners' Organisation (Pensionärernas Riksorganisation), local restaurants, Hjo Handel, gardening associations, adult education association (Studieförbundet Vuxenskolan, Studieförbundet) and The Federation of Swedish Farmers (Lantbrukarnas Riksförbund).

STEP 2: FOOD HUB

When the community food center has been established and the demand for locally produced food has grown stronger, a food hub is then ready to be introduced to create a strong food distribution node in the municipality. It will have the capabilities to store, process and distribute food to the community food center and to other parts of the municipality and in the region. The concept of the food hub is for the producers to share space, machines and transport in order to reduce the food transportations, emissions

and allow them to spend more time and money for producing. The food hub will then connect local and regional stakeholders within the food business and marketing the local actors on a bigger arena. The distribution will be managed through scheduled transports with the base at the hub. In this step Hjo Municipality and other institutions is proposed to increase their procurement of locally produced food, which can easily be distributed via the food hub to schools, elderly homes, kindergartens, etc.

STEP 3: FOOD HUB SYSTEM

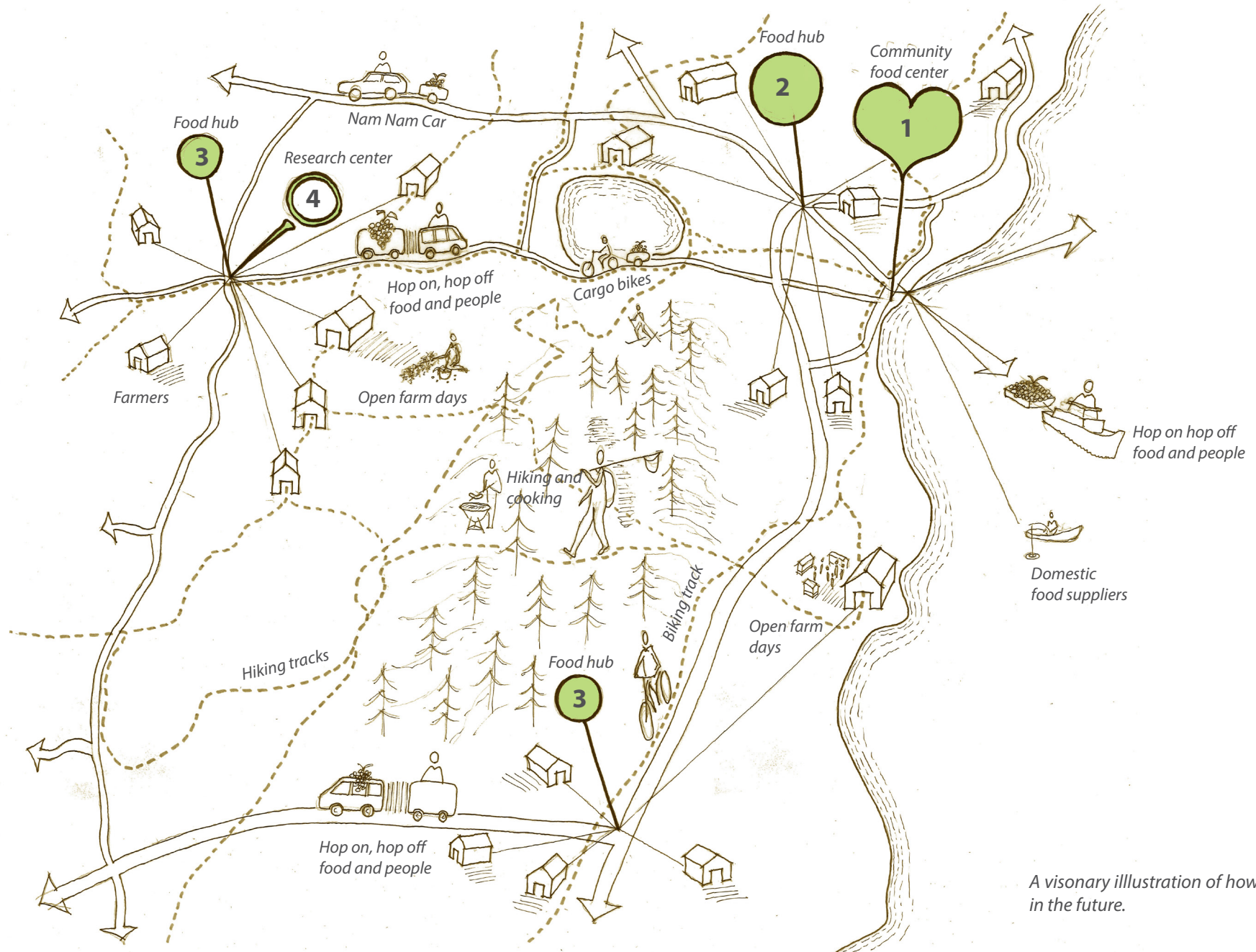
The advantage of having multiple food hubs is to bring the hubs closer to the producers which reduces the transports between the farms and the hub. The creation of networking hubs strengthens the collaboration between food actors. This could contribute to an increased distribution of other resources between the producers. To decrease the great amount of waste produced within the food chain, the food hub system could be used to encourage actors to collaborate. By-products from one actor in Hjo could be a resource for someone else will reduce the need of raw materials and reduce their solid waste disposal costs for those by-products. This helps to create a local circular system within the municipality where resources are reused. Members of the Co-Food-Hjo network could have discounts in the services and products it provides, which gives a motivation to support each other as a unity of local actors. Co-Food-Hjo create extra values for those

who lives sustainable rather than punish those who are not. A network of food hubs can connect the urban and rural areas by offering hop-and-off tours and promoting existing hiking paths for tourists and inhabitants to visit different producers learn more about their production. The hop-and-off transportation could also be combined with food distribution.

STEP 4: RESEARCH CENTER

An established network of large and small food producers will give Hjo a prominent role and identity as a food municipality. This can increase the possibility of attracting other actors and institutions within food production and agriculture. This could result in involving institutions as SLU, that could establish a research connected to one of the food hubs. This is a way of outsource the research closer to the agricultural production areas. The research center could have certificates for own research and collaboration with local farmers.

COMPREHENSIVE STRATEGY



A visionary illustration of how Hjo could look like in the future.

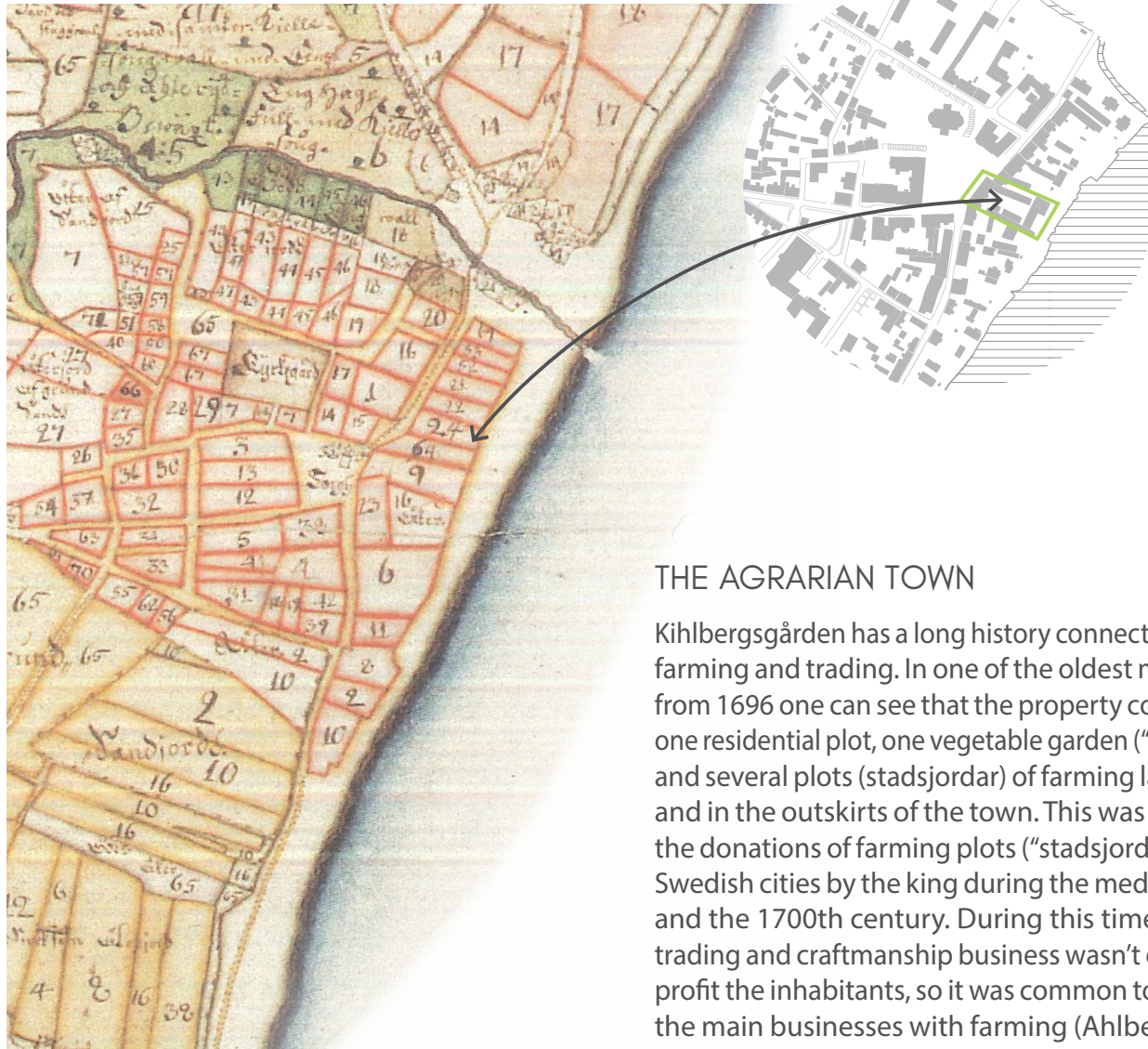
SITE ANALYSIS // **KIHLBERGSGÅRDEN**

KIHLBERGSGÅRDEN



Kihlbergsgården has been chosen as the site for the project and the old barn and storage building “Grönköping” on the courtyard is the main building for the development of the community food center.

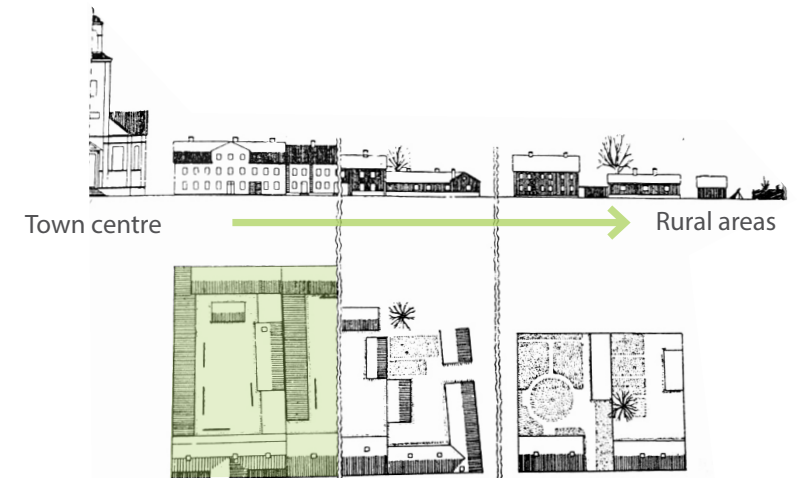
HISTORICAL BACKGROUND



The map of Hjo in 1696. Number 9 is the property, 30 nowadays called Kihlbergsgården (Lantmäteriet Gävle)

THE AGRARIAN TOWN

Kihlbergsgården has a long history connected to both farming and trading. In one of the oldest map of Hjo from 1696 one can see that the property consisted of one residential plot, one vegetable garden ("kåhlgård") and several plots (stadsjordar) of farming land inside and in the outskirts of the town. This was a result of the donations of farming plots ("stadsjordar") to the Swedish cities by the king during the medieval times and the 1700th century. During this time existing trading and craftsmanship business wasn't enough to profit the inhabitants, so it was common to combine the main businesses with farming (Ahlberg, 1999). The pre-industrial agrarian town were characterized by seasonal markets, farmers markets on the square



A section through a typical pre-industrial town. The merchant yard is highlighted in green (Photo edited, Hellspong & Löfgren 1974).

and trading with local craftmans. Merchant yards were gradually developing along the squares. In Hjo the block "Långan" consisted of wealthy merchant and craft properties. And Kihlbergsgården was one of the biggest. These were signified by gates facing the street, wide enough for a horse and carriage to pass. It was also common for the farmers from the rural areas to accomandate their horses at these places during the markets. The long and narrow courtyards surrounded by long wooden buildings stretched to the lake. This benefited the business of tanneries and dyers (Tre Trästäder, 2016; Runt Vättern, 2016).



Bomanska gården in Västerås was a similure merchant yard as Kihlbergsgården. This photo is from in the beginning of 1900. (Photo: Foto: Axel Sundströms collection).



The hardware shop Kihlberg & Källmark in the beginning of 1900 (Josef Kihlberg AB, 2016).

THE INDUSTRIAL ERA

Towards the end of the 1900th century the expansion of new business changed the city scape and the stores. Exposure towards the street and the front facades became increasingly important for the new specialized stores. Many buildings were therefore rebuilt to fit better for trading along the shopping street (Tre Trästäder, 2016). Since the 1870s the plot have been used for iron manufacturing and selling. In 1918 Josef Kihlberg took over the previous hardware

shop (Kihlbergs & Källmark Järnhandel) and his new firm expanded rapidly and run until 1968 (Josef Kihlberg AB, 2016). Besides the hardware shop the property has accomendated a grocery shop, flower shop, watchmakers and opticians (Ylander, 2016).

CULTURAL HERITAGE

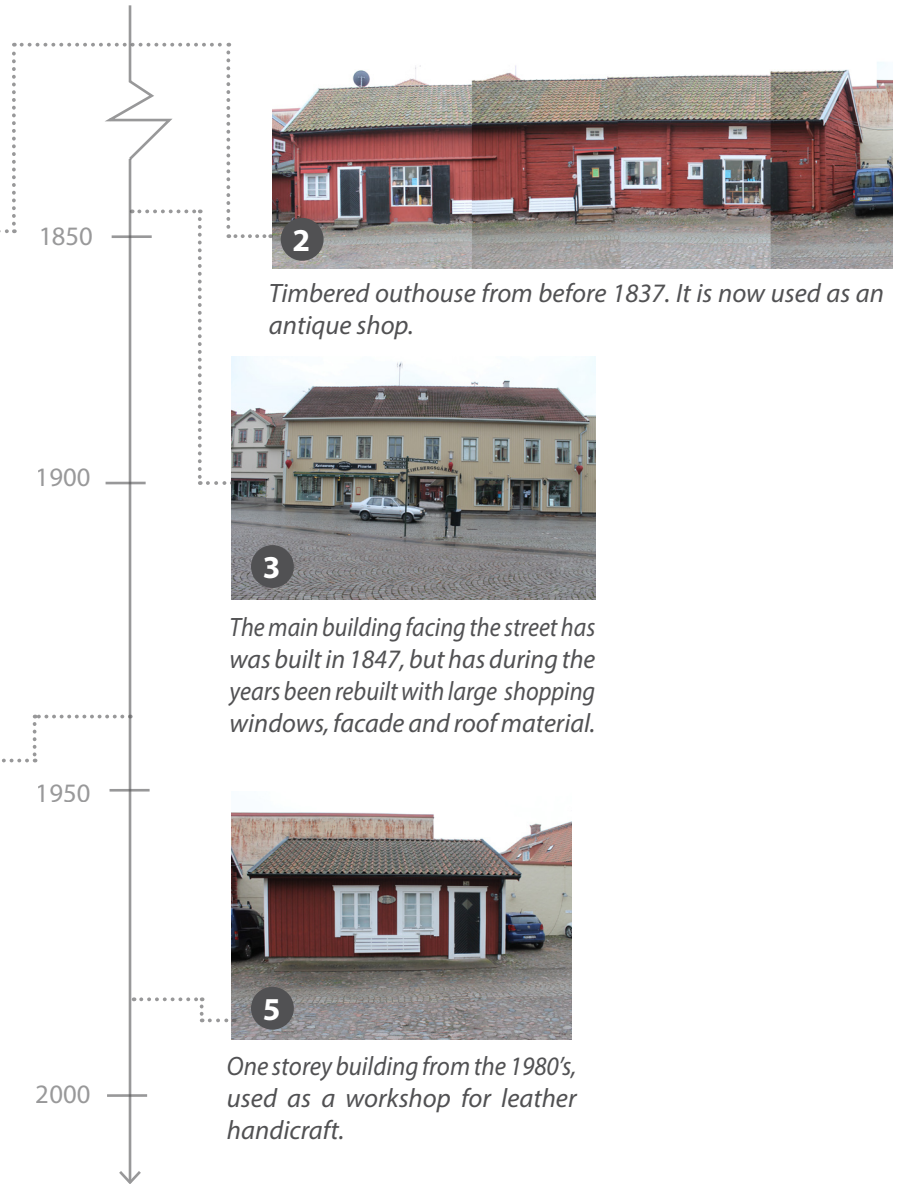
The town core of Hjo is pointed out as a national interest of cultural heritage. This is because of the well preserved medieval street pattern with small scaled wooden buildings and town yards, such as Kihlbergsgården. And no measures that serverly affect the national interest are allowed (Hjo kommun, 2010, p.38). When refurbishing and adding new development existing buildings should to keep their original appearance. If the building is transformed in that extent that is loses its original appearance (by e.g. changing windows or facades), it should be possible to reverse the building back again. Except of the orginal facade material, reed roof tiles and other time specific elements the windows and their placement is an important element that should be conserved. When replacing windows, the new ones must have the same appearance and composition (Hjo kommun, 2003).



"Grönköping" - a two storey building build in timber from before 1837. Original it was used for storage and as barn, but during the lastest years, until 2016, it has been used as a restaurant and café.



Two story building from the 1940's consisting of a pizzeria on ground floor and appartments on the second floor.



Timbered outhouse from before 1837. It is now used as an antique shop.



The main building facing the street has been built in 1847, but has during the years been rebuilt with large shopping windows, facade and roof material.



One storey building from the 1980's, used as a workshop for leather handicraft.

GRÖNKÖPING



This is the front elevation of the building facing Kihlbergsgården.



Topography slopes down to the backyard. On the slope, there are two small non-insulated rooms that were added in 2004.



Between the building and the two rooms. It also has great views to the Lake.



The right room of the building was not used and it does not have interior cladding.



Furniture and interior decorations from the restaurant are still there.



The first floor was not used when the building was a restaurant. It is also non-insulated.

SITE ANALYSIS



The courtyards along Hamngatan all consist of old commercial yards. But today they are all private courtyards with housing. The only courtyard that consists of commercial activity today is Kihlbergsgården. But like the rest of the courtyards Kihlberggården lacks a strong visual connection between the public sphere and the courtyard, which give it a private feeling.



1



2



3

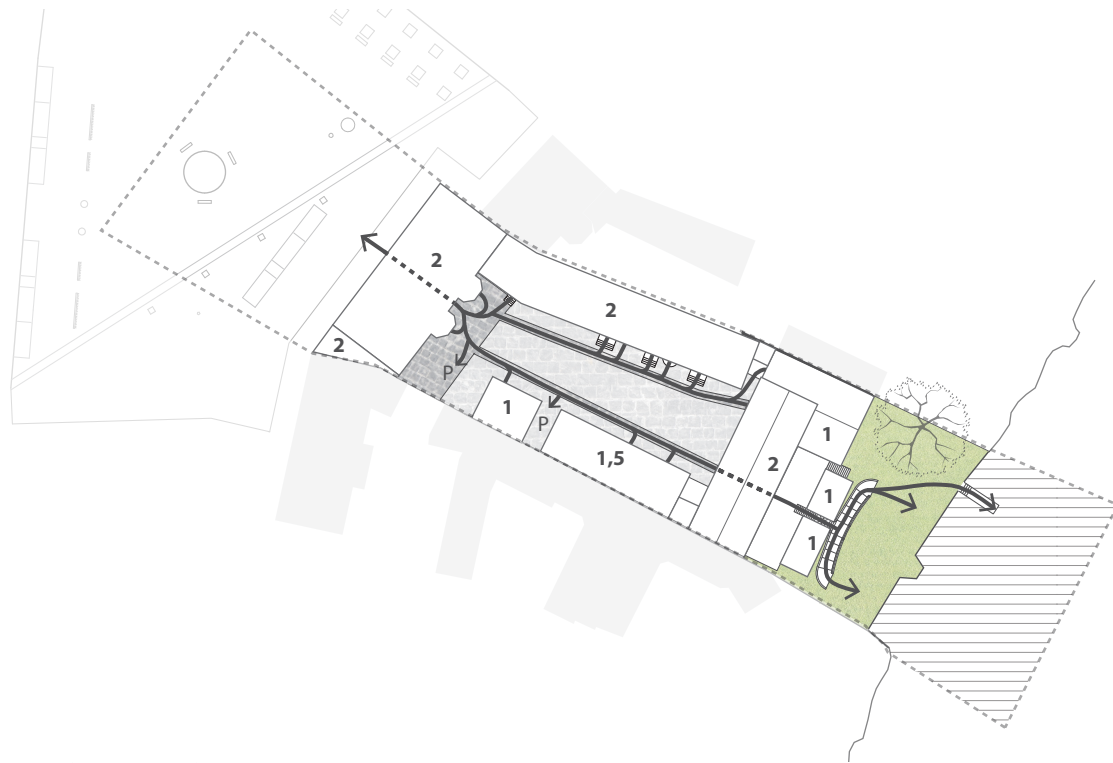


4



5

SITE ANALYSIS



MOVEMENT AND SHAPE

The only access to Kihlbergsgården is via a narrow passage through the building facing the town square. This makes the plot partly visible from the square, but it causes also a visual barrier between the square and the plot. From there, two pathways are creating the main axis towards Grönköping and invite people to move along the edges. This, together with the volumes of the surrounding buildings, enhance the long rectangular shaped courtyard and the feeling of enclosure. So the main movement is straight towards

Grönköping with minor movements to enter the other buildings. Some interventions along the edges can be done to emphasize this axis, and the entry points of the other buildings. The backyard is perceived as more private because it has no visual connection from the west side. It has a wider shape and opens up towards the lake and offers open views over the lake and towards the harbour.



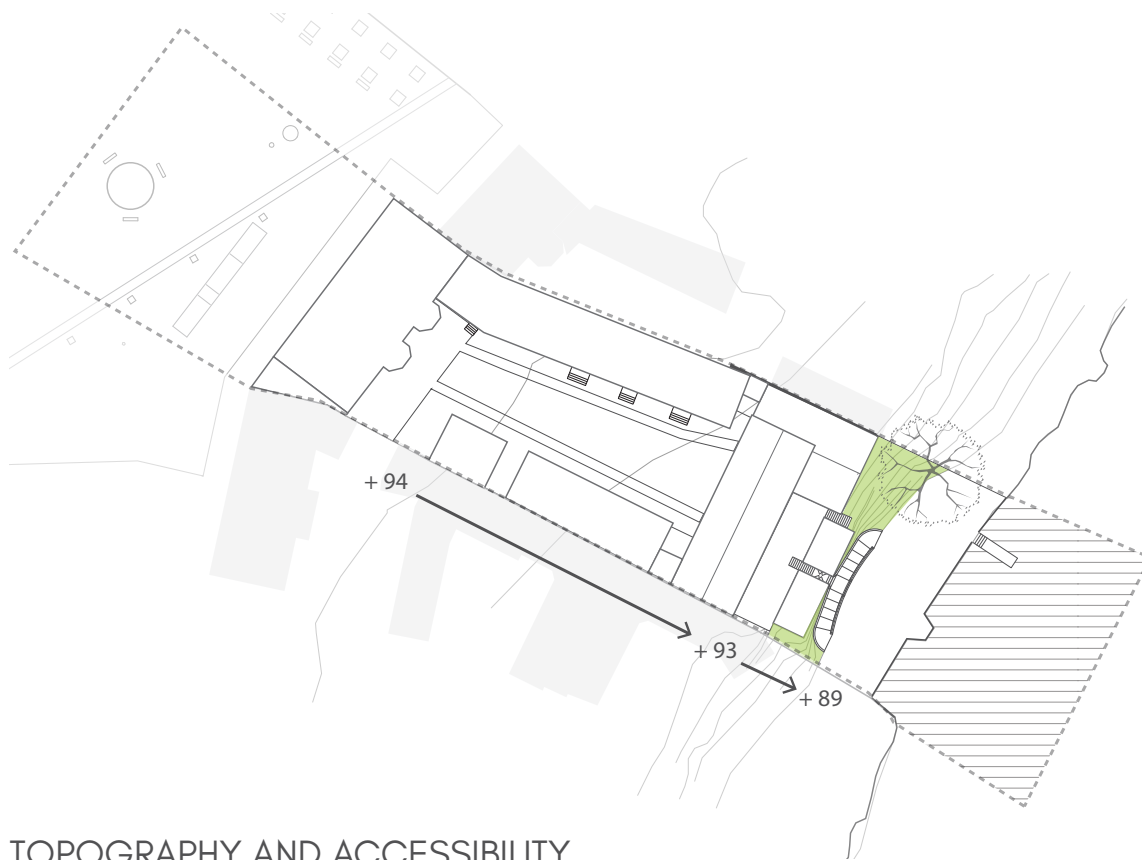
SITE ANALYSIS



ZONING AND USAGE

The courtyard has no clear zoned areas and no furnitures for sitting, which makes the courtyard feels like a place for passing through. The entrances to the pizzeria and the private apartments on the north side are perceived more private than the south side where the antique shop and the workshop is located. But the mixed-use area is a strength that is possible to enhance with more public activities, when there're already public target points there.

SITE ANALYSIS



TOPOGRAPHY AND ACCESSIBILITY

The accessibility in the area differs between the courtyard and backyard due to the level differences. The courtyard is slightly sloping towards Grönköping. And the slope in the backyard is making the accessibility to the lake more difficult. The passing through the stairs is the only way towards the lake. For future development the lack of accessibility, especially in the backyard, is thereby an important issue to solve.



SITE ANALYSIS



CLIMATE

Due to the surrounding buildings the courtyard is wind protected. The north side of it has good sun exposure. The backyard is more open more exposed for winds from the lake. The north and north-east side has thereby good possibilities for creating sunlit activity areas.

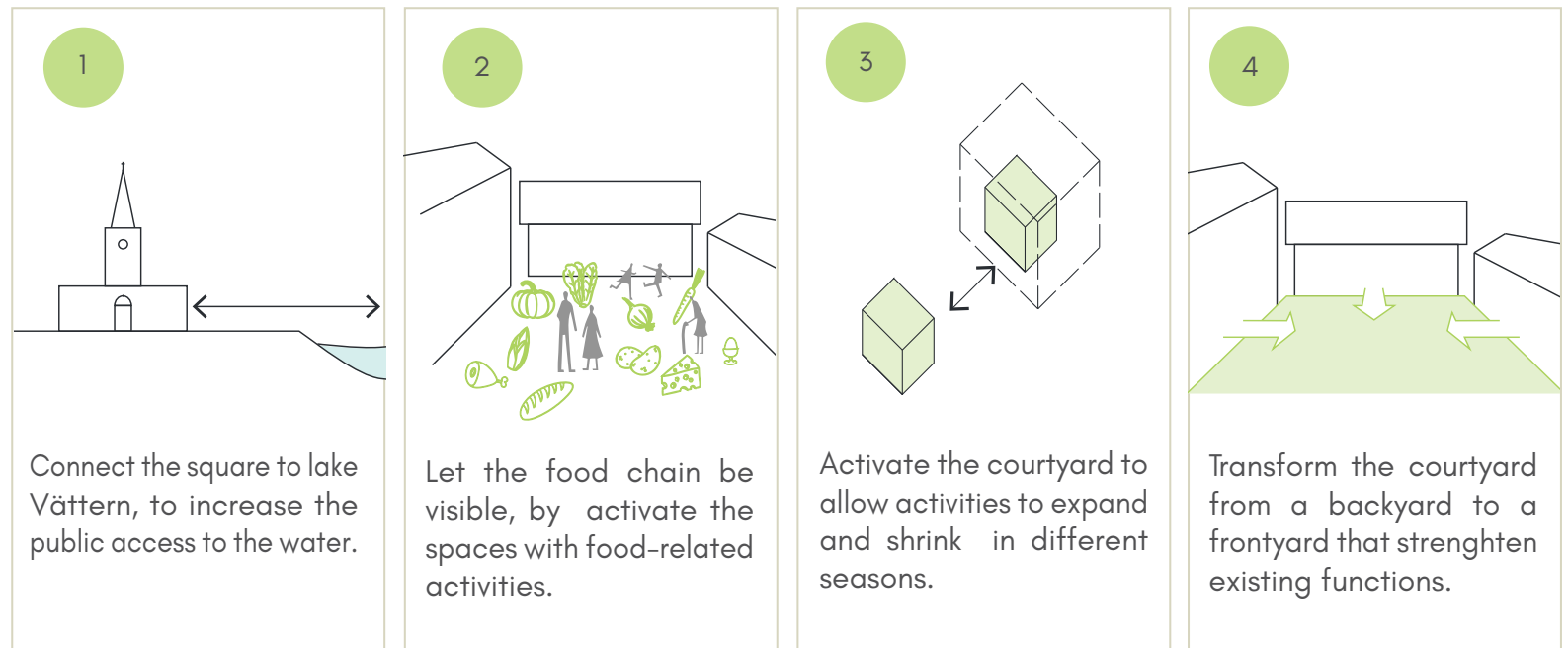
GREENERY

The courtyard exists of a hard landscape with cobblestones and paving stones without any greenery. At the back there's a lawn and one elm tree. The former elm on the wooden deck have been cut down, is an interesting detail that could be incorporated for future development. The unused lawn have good potential to be used for farming.

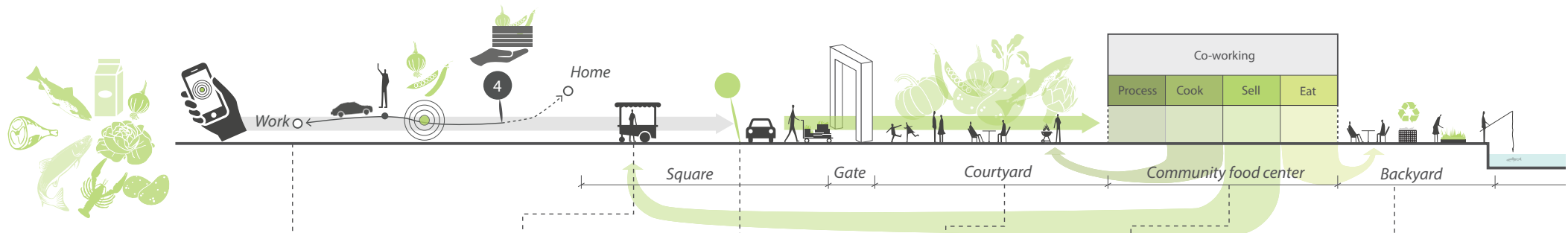
DESIGN PROPOSAL // **GRÖNKÖPING - A COMMUNITY FOOD CENTER**

DESIGN STRATEGIES

The analysis has shown that the site has a strategic location in Hjo town that can link the city square with the lake Vättern. Also, the courtyard's physical characteristics, climate conditions, and functions around it can be a good incubator for more public activities.



PROGRAM



1 Producing

If more private actors produced food and distribute their surplus, the range of local food products will be wider. These, together with the commercial food actors, could then strengthen the local market for locally produced food.

2 Transport

Commuters using the app "Nam nam car" combine their travelling to and from work with transporting food.

3 Square market

The existing market on the square will be supported by products from the community food center during market days.

4 Attraction point

A "station" that attracts people to visit the community food center, giving information about the local food chain and a place for food delivery.

5 Courtyard

Flexible space for social and food-related activities that can expand and shrink depending on the seasons.

6 Community food center

The building visualizes the food chain by different food functions and offers spaces for co-working. The passage through the building connects the courtyard with the backyard and increases the public access.

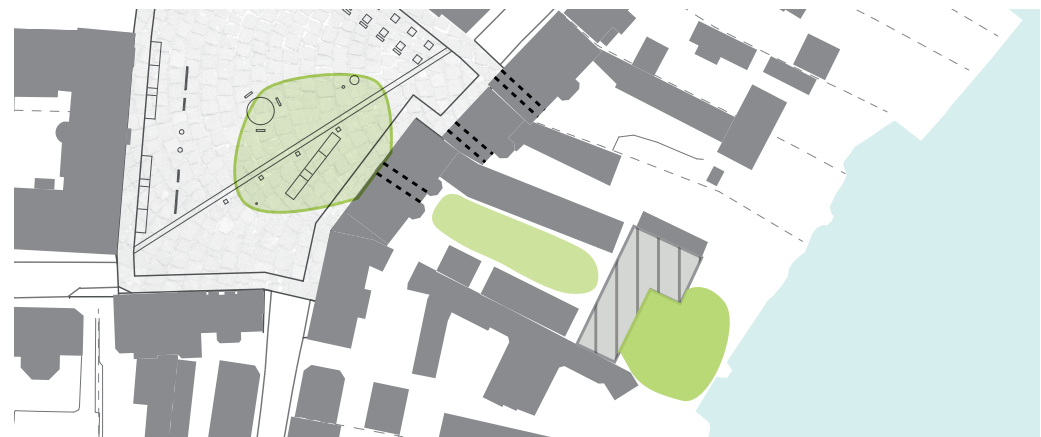
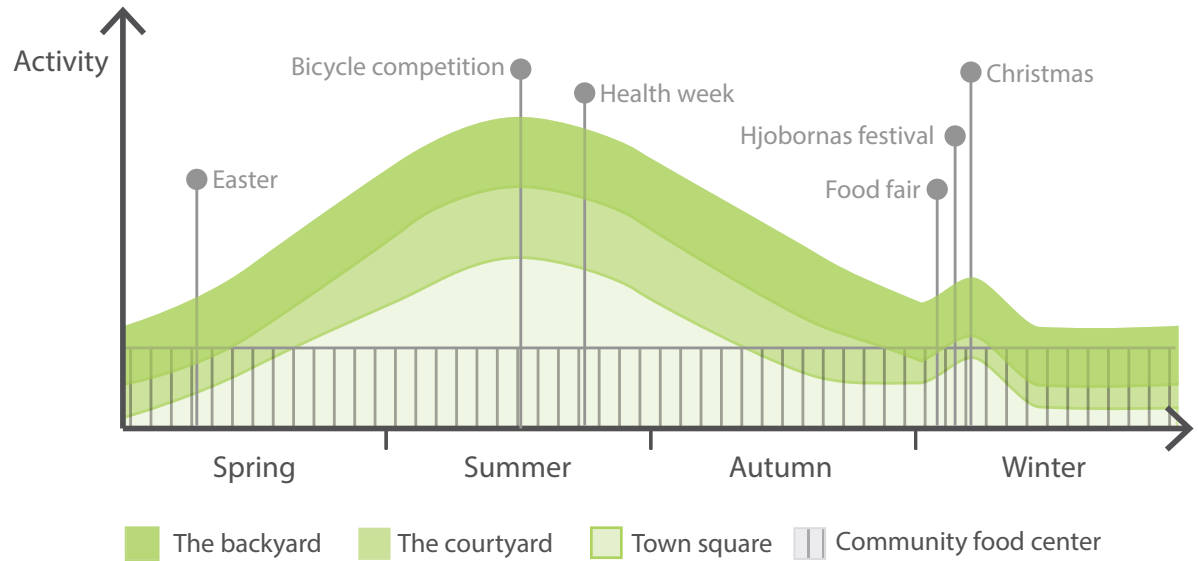
7 Backyard

Place for gatherings, recreation, educational based farming and composting.

SEASONAL ACTIVITIES

ACTIVITIES EXPAND AND SHRINK AROUND THE YEAR

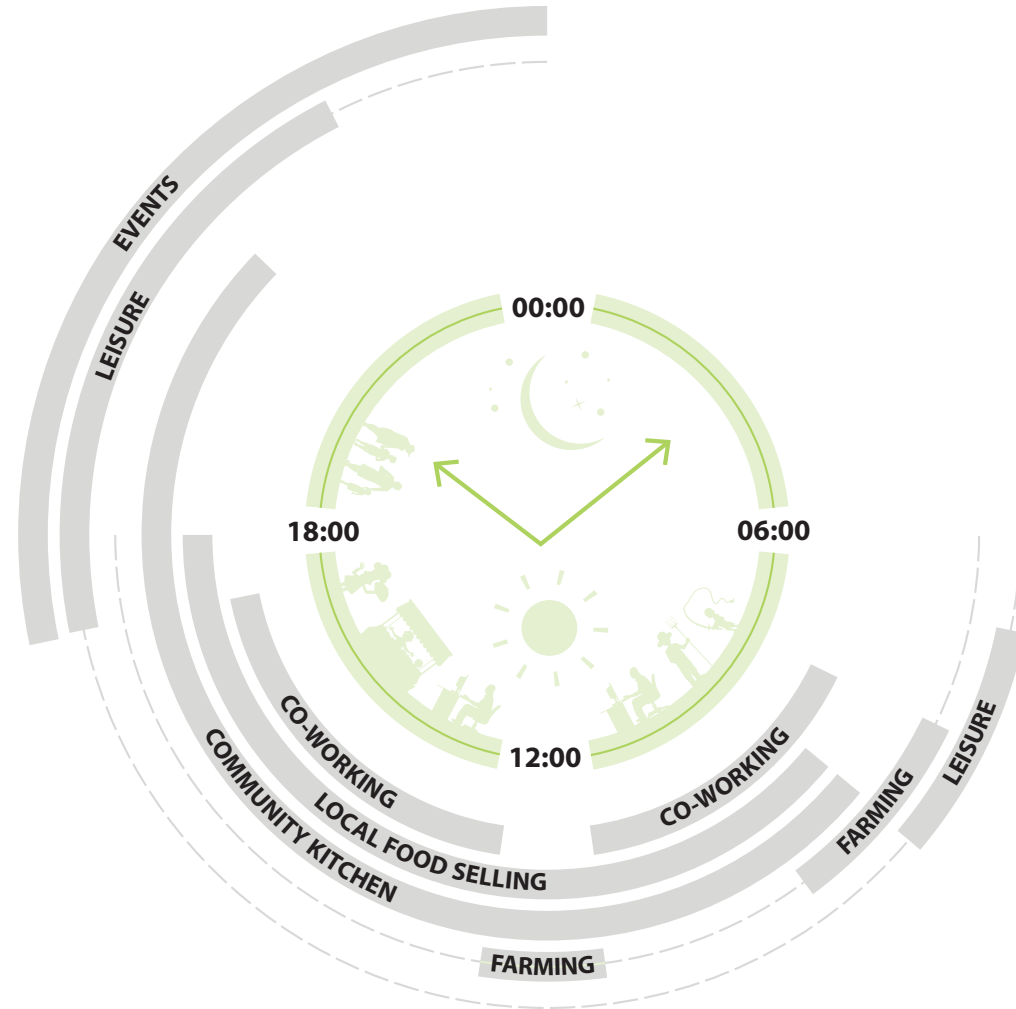
The community food center activities expand and shrink in the outdoor spaces through the year, and take part in the yearly events that already happen in Hjo. However, the co-working is stable all year long since it is not directly connected to local food seasons.



DAILY ACTIVITIES

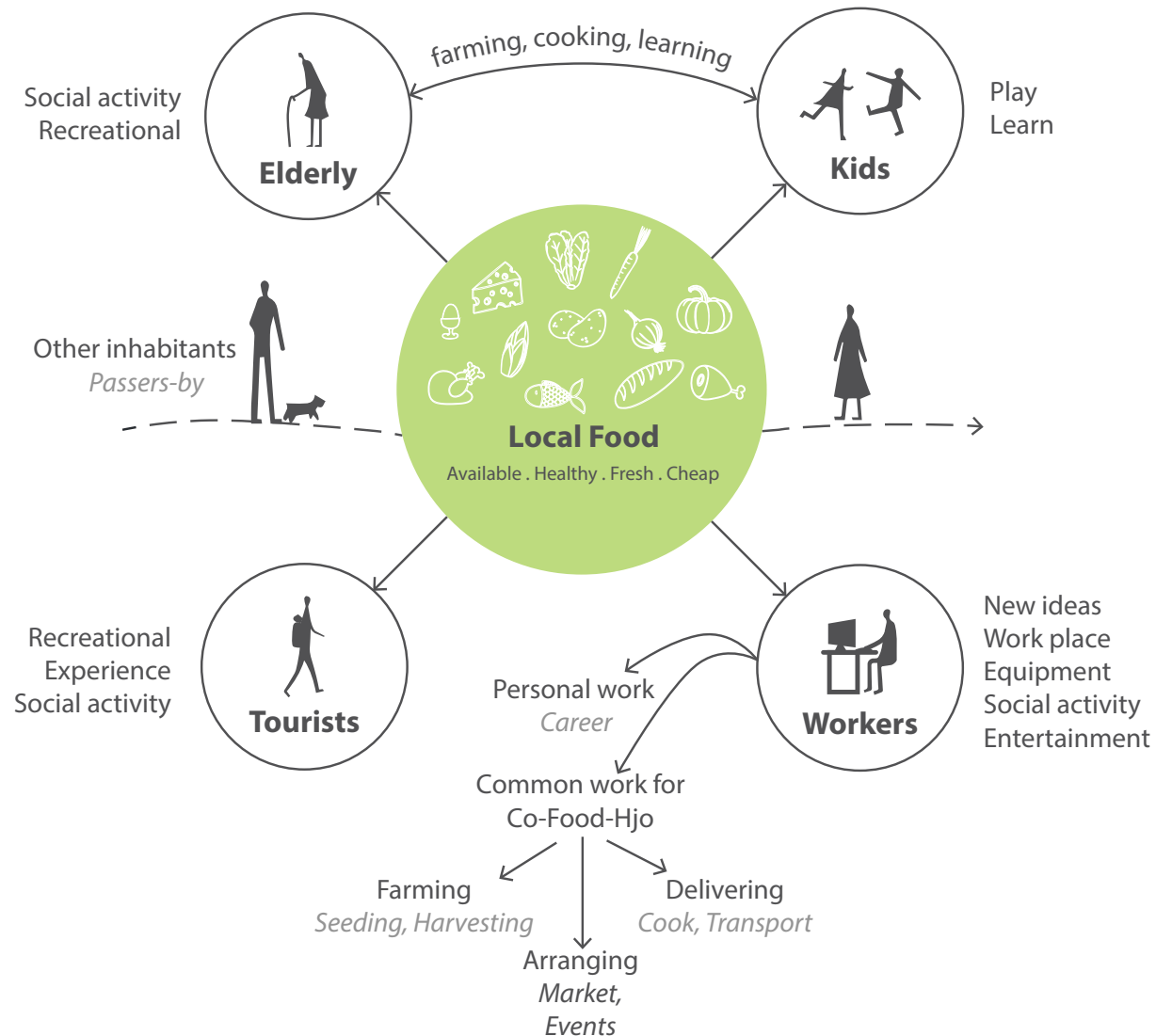
COMMUNITY FOOD CENTER DAILY SCHEDULE

Several activities are going in parallel around the clock. Taking advantage of both the indoor and outdoor spaces.

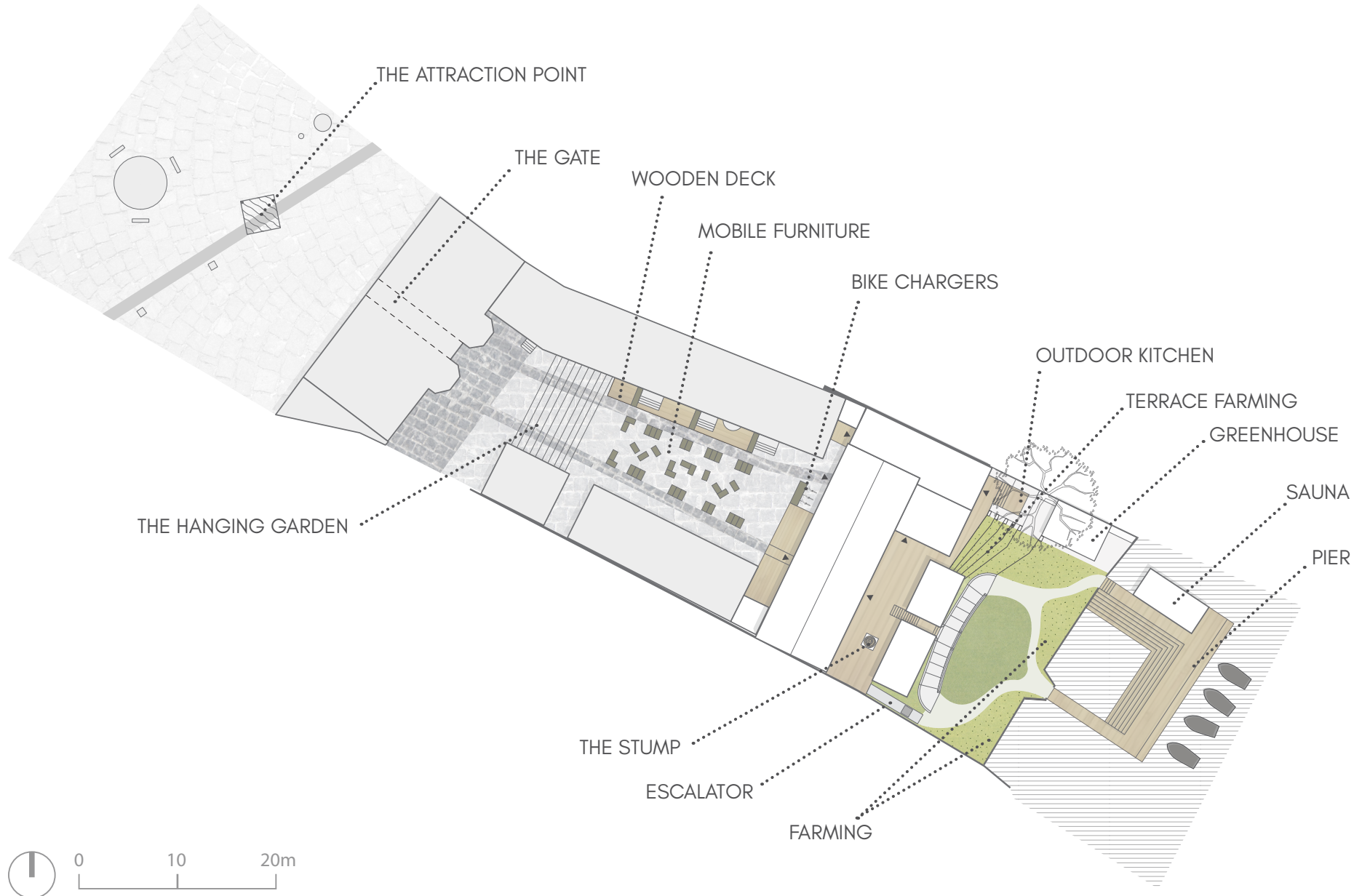


WHAT THE COMMUNITY FOOD CENTER OFFERS TO THE USERS

The community food center does not only offer local food, it also attracts various users categories through the different spaces. It is community-based where people contribute in it and also get some benefits. For instance, elderly and children can meet there and do activities together like farming and cooking. The community food center also offer a co-working space, where people come closer and share ideas. It can also be a touristic attraction in the city, to enjoy the location, have a local meal and knowcmore about the local food culture.



SITE PLAN

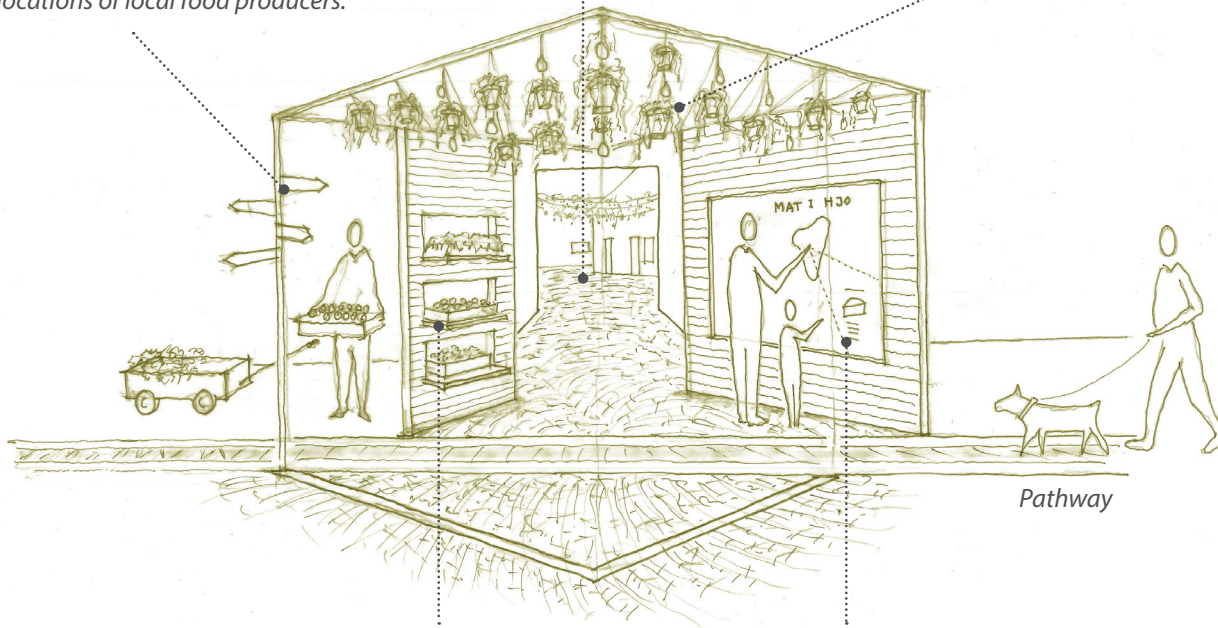


CALL OUTS

Signpost is pointing out tourist and public destinations and the locations of local food producers.

The attraction point is framing the view to the courtyard

Hanging garden and lights



Pathway

The food is delivered to the shelves and collected by the staff at the community food center.

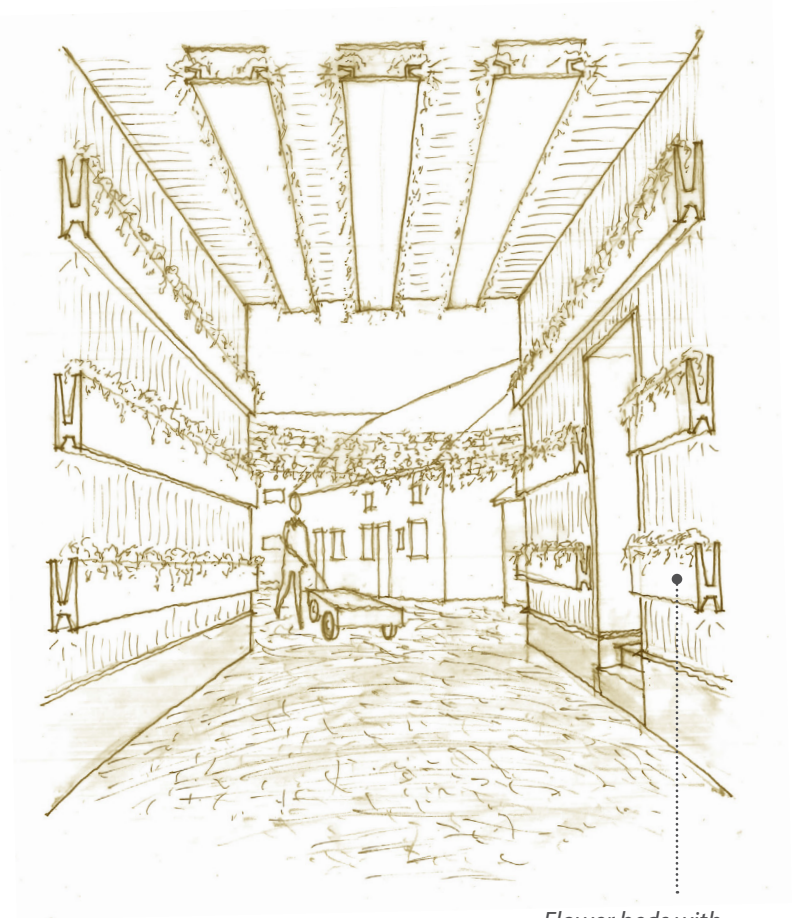
The information screen is giving information about the local food in the municipality and serves other information purposes for inhabitants and tourists.



The hanging chairs ("the eggs") can be seen from the gate.

THE ATTRACTION POINT

Located on the paved pathway in the city square to frame their view towards Kihlbergsgården. Also, it is street furniture, where people sit, learn about local food and a point of food delivery.

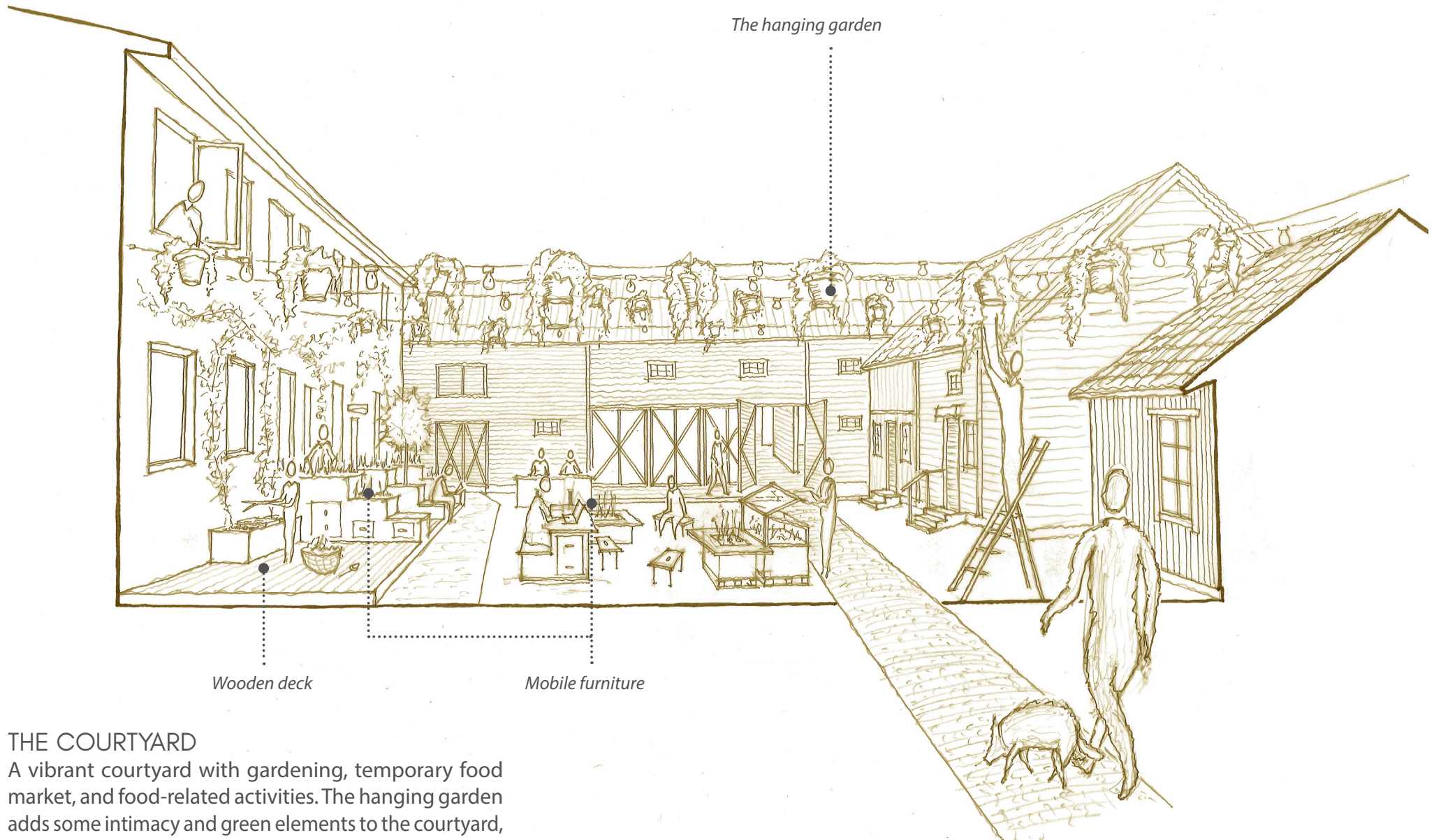


Flower beds with light installations

THE GATE

Simple intervention by adding greenery and lights to the gateway. To make it more welcoming, and distinguish its public use from the other courtyards.

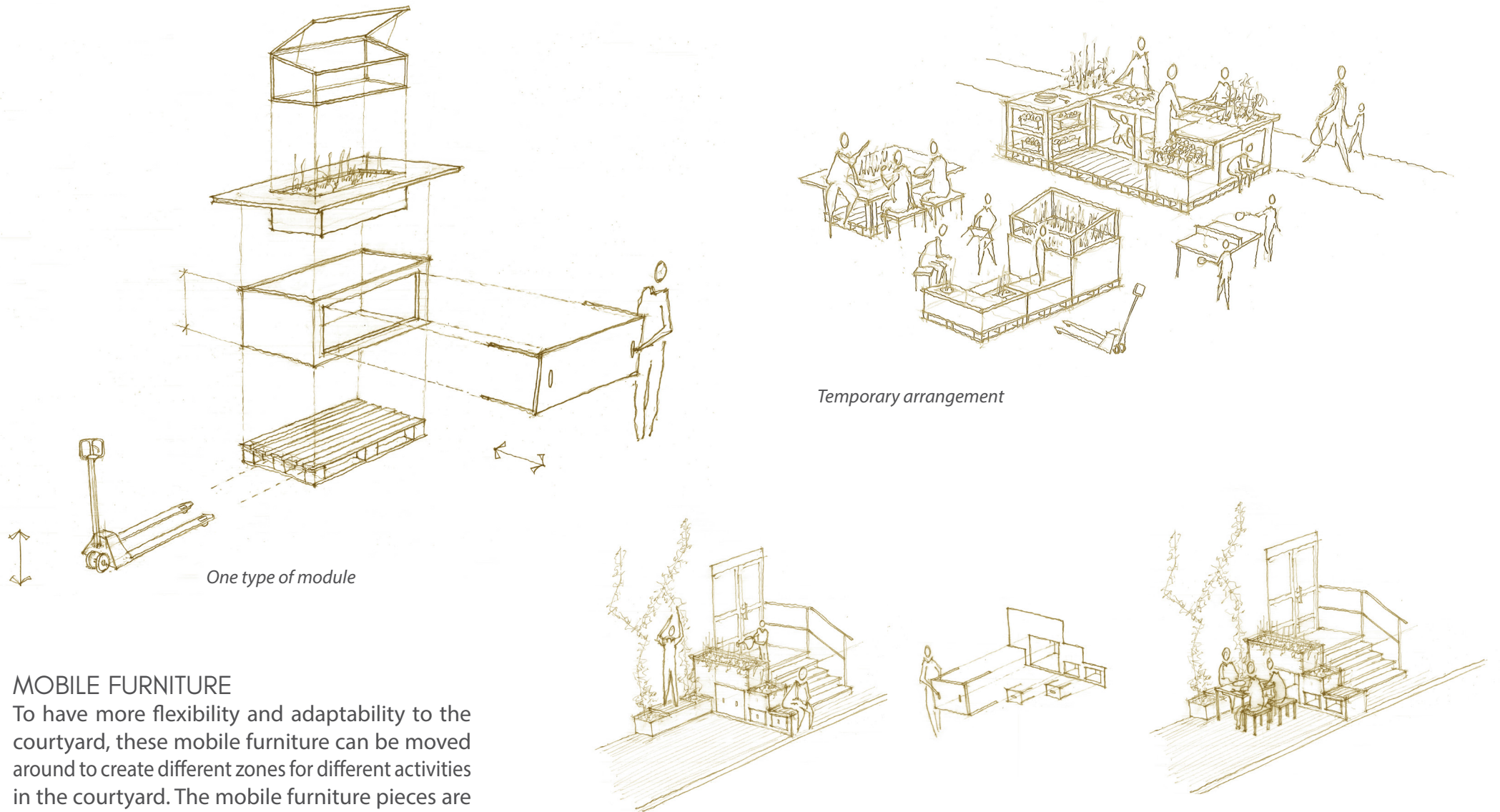
CALL OUTS



THE COURTYARD

A vibrant courtyard with gardening, temporary food market, and food-related activities. The hanging garden adds some intimacy and green elements to the courtyard, and can be seen from the city square.

CALL OUTS



MOBILE FURNITURE

To have more flexibility and adaptability to the courtyard, these mobile furniture can be moved around to create different zones for different activities in the courtyard. The mobile furniture pieces are designed to be assembled and disassembled to create more options of how to use them.

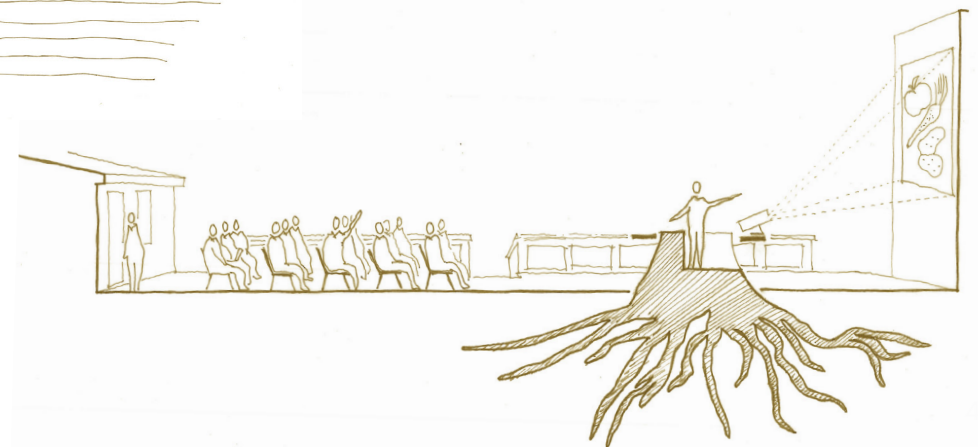
The modules along the north side of the courtyard could be rearranged on the wooden deck depending on the activities.

CALL OUTS

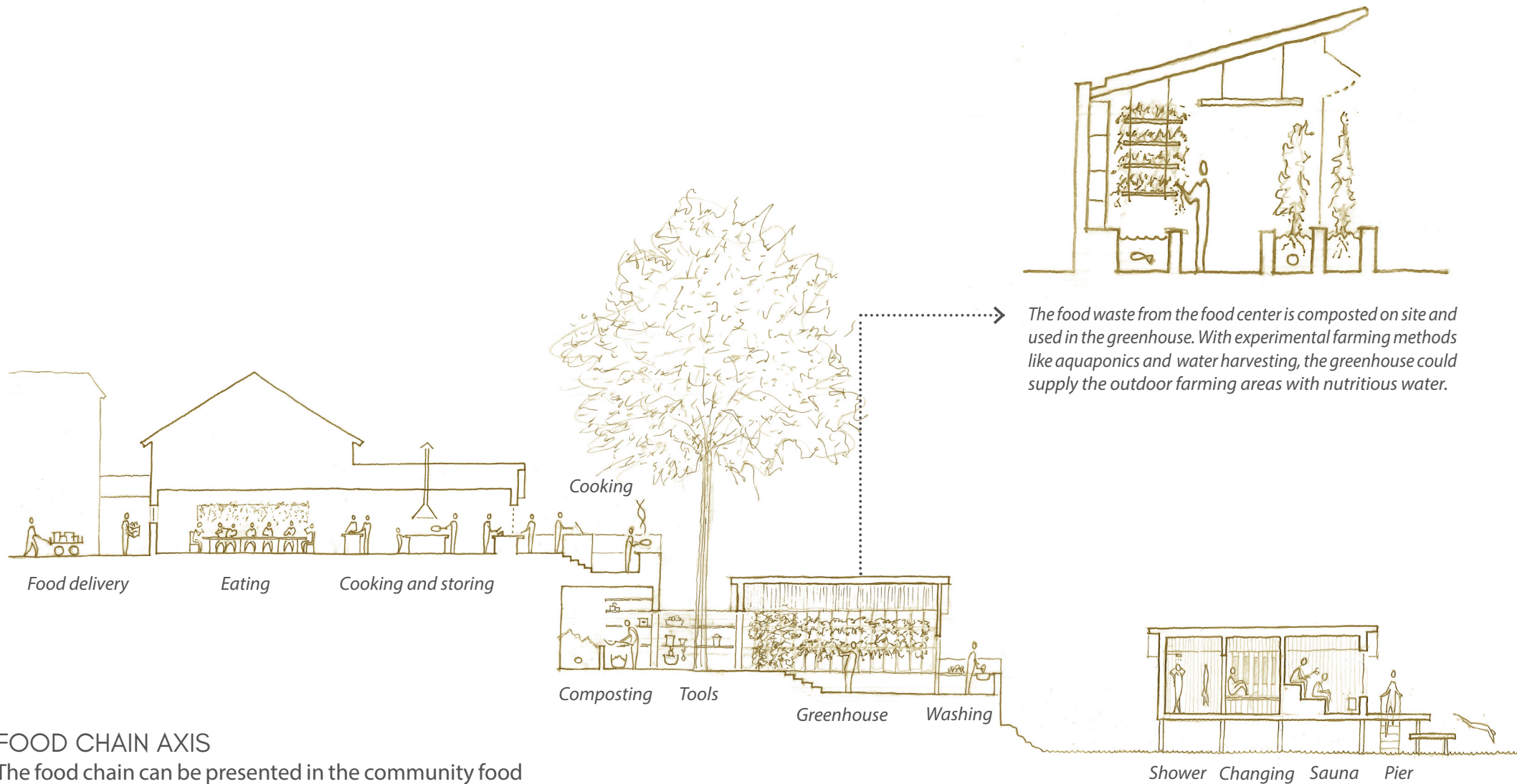


THE TREE STUMP

The old cutted tree is a great feature in the backyard terrace. It can be the focus point and use it as a podium for speeches, or a table to gather around.



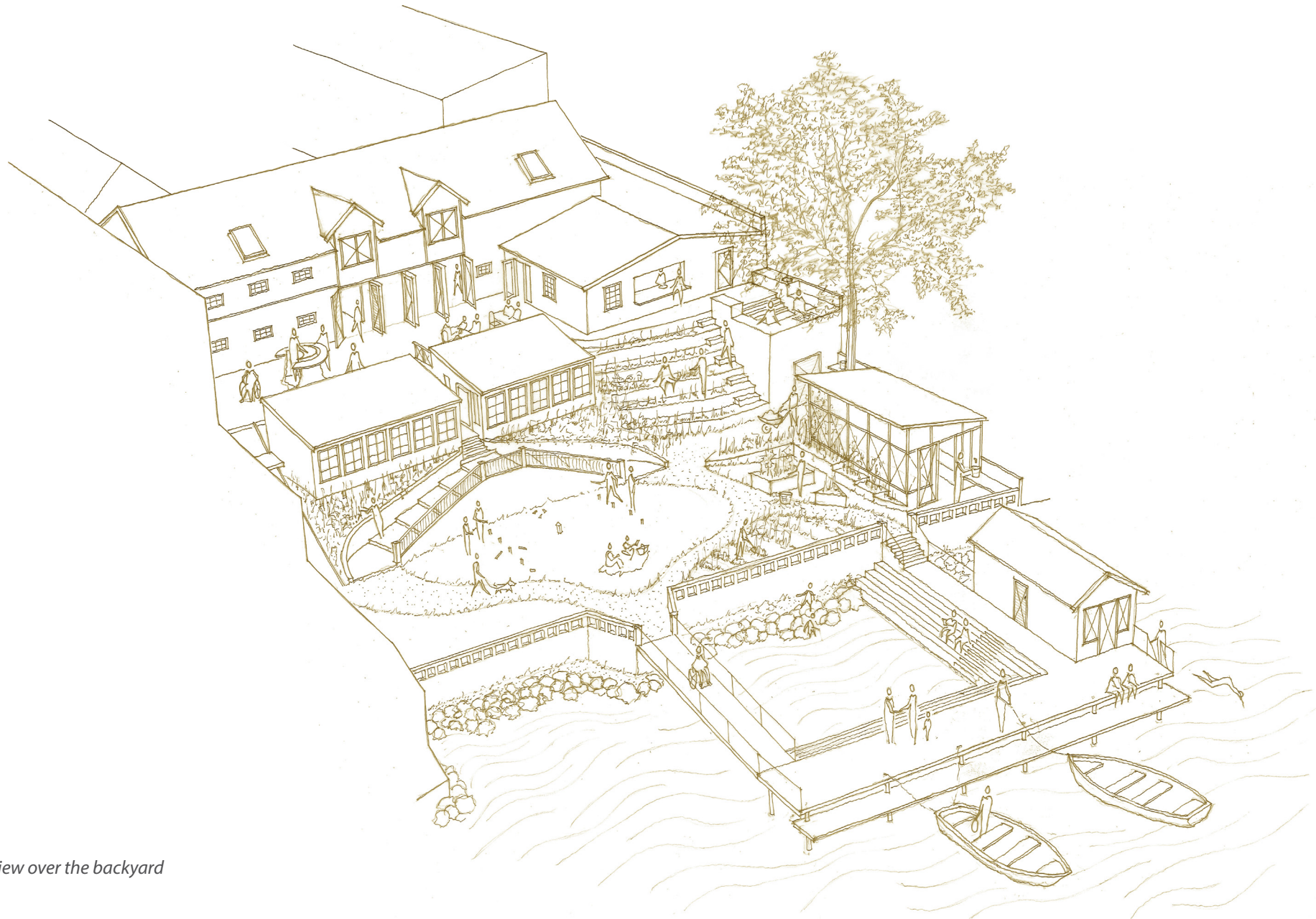
CALL OUTS



FOOD CHAIN AXIS

The food chain can be presented in the community food center by the hierarchy of the spaces. Starting from delivering food to storage, cooking and dining, to composting and farming again the in the greenhouse.

PERSPECTIVE



A view over the backyard

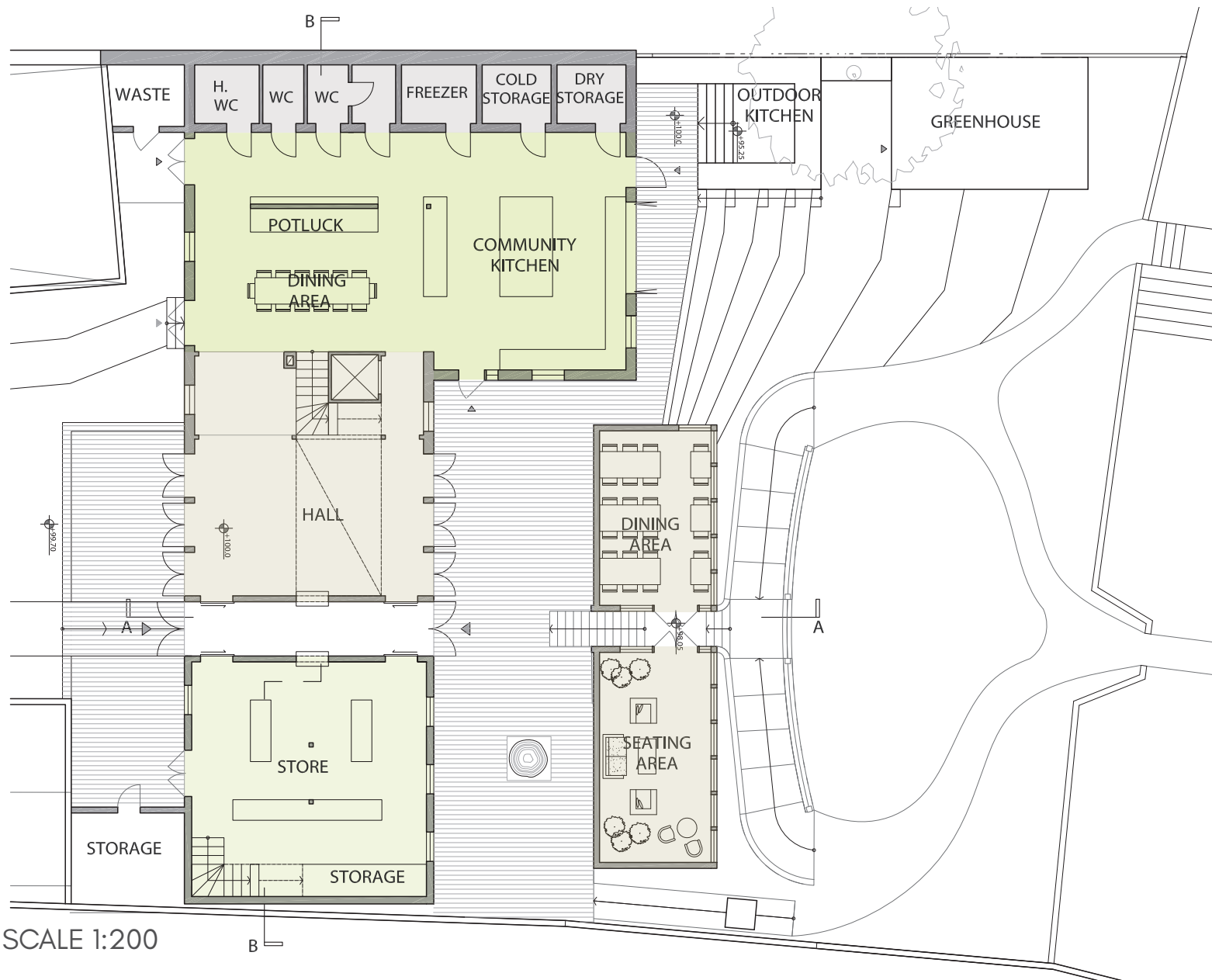
GRÖNKÖPING TRANSFORMATION AND THE ARCHITECTURAL HERITAGE

GRÖNKÖPING TRANSFORMATION

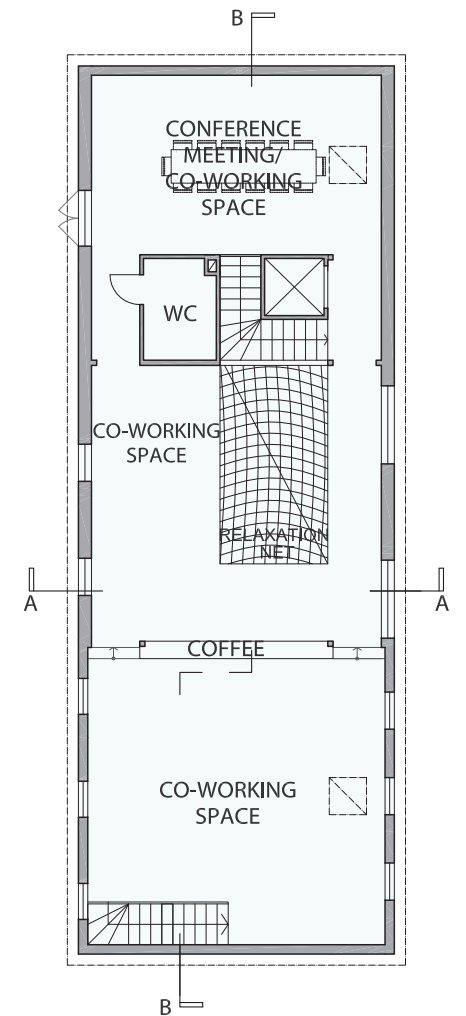
The existing building has a valuable architectural heritage. When refurbishing and adding new development, the existing building should keep their original appearance. If the buildings is transformed in that extent that it loses its original appearance (by e.g. changing windows or facades), it should be possible to reverse the building back again. However, to make the building function better as a connector between the city square and the lake Vättern some changes are needed. In both western (front) and eastern (back) elevation, higher and wider doors were placed in the same architectural character of the old ones within the existing structural frames, to make it reversible. Also in the Eastern (back) elevation, two dormer windows, and two skylights were added to have more daylight in the first floor, as well as getting wider views towards the lake. In the interior, the existing structure was preserved, and the new spaces were divided according to it.



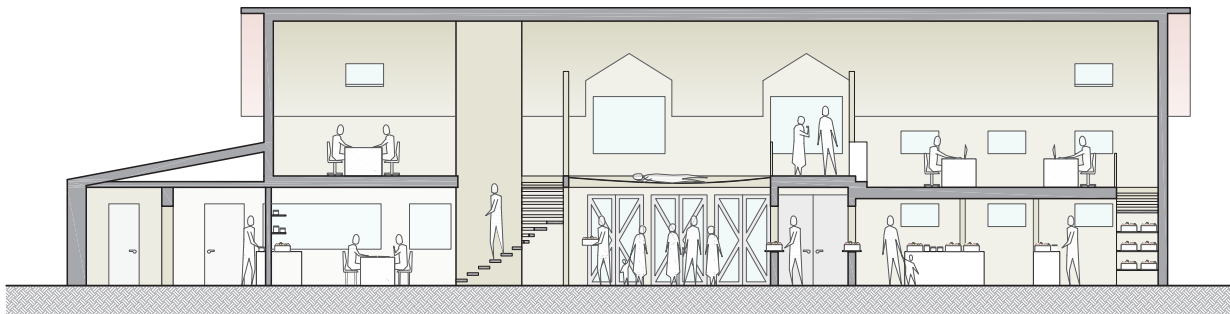
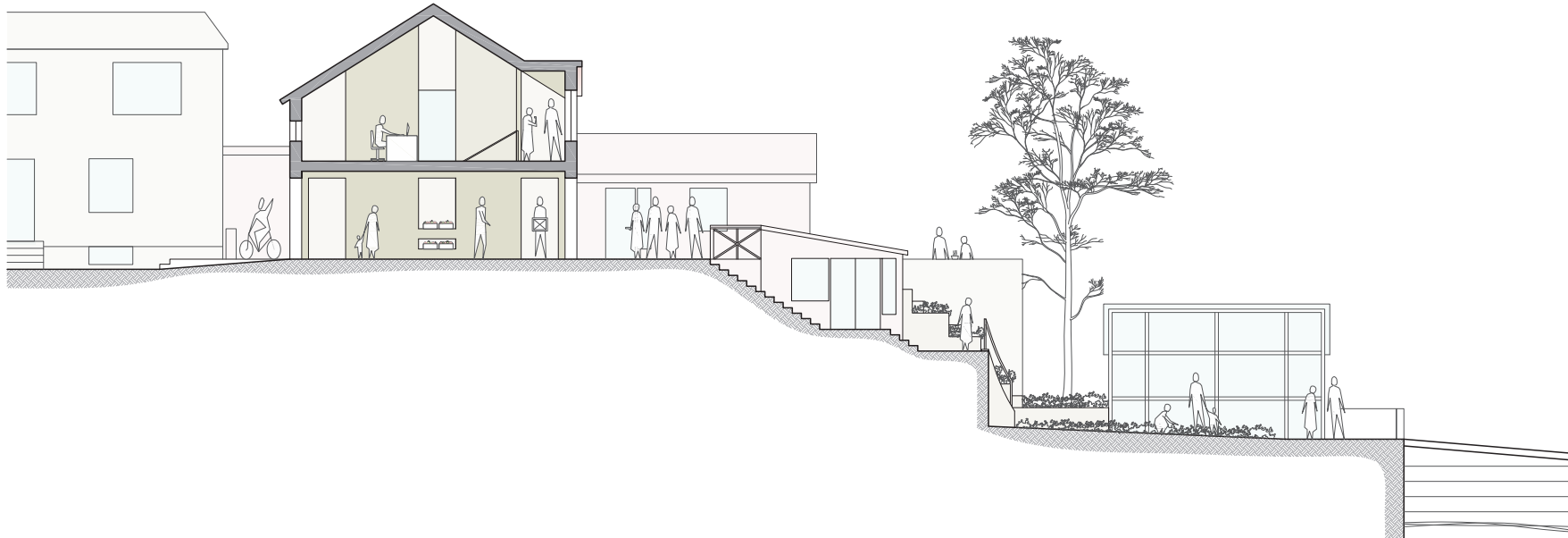
PLANS



- Community kitchen
- Food store
- Hall / seating areas
- Services
- Co-working space



SECTIONS



SCALE 1:200

A STARTING POINT, NOT THE WHOLE SOLUTION

Sweden needs to import some kinds of food that cannot be produced locally, which means dependency on oil. To be more resilient towards the oil dependency, it might require people to change to a more 'local diet' where dependency on imported food is low. The food community center is proposing one way to start the change towards a more sustainable food system in Hjo. It will not change the food system by itself. Changing the way of how the current food network is operating can be hard. Especially for the well-established, large-scale networks. So it is not expected to have all the food producers in Hjo under the Co-Food Hjo vision. In that case, Co-food Hjo can be a great addition to food system focusing on the local food and a starting point for transition.

CARROT APPROACH

The food community center tries to motivate people to change/transform to more sustainable habits, by the idea of rewarding - doing right creates benefits. For instance, delivering food from the farms to the food community center when commuting to/from work, will be rewarded by free amount of local food from the center.

THE MISSING ENTREPRENEUR?

It is very important for the start of the key project, the food community center, to have an entrepreneur to manage and run the project. It can be a community-based association that can manage the co-working and the local food network. And based on the current situation, there is an interest among the inhabitants, in both the local food.

DIVERSIFIED FOOD SUPPLY

Thinking of the scenario where Co-Food Hjo vision becomes grounded and the food hub network is very strong, it can have negative effects. For instance, monopoly of food by the food hub network, which can exclude new food producers. But the food hub network should be a middle step between the small farm shop/farmer and the people. The food system will complement - allowing small-scale food producers to still sell their products directly to the consumers.

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PICTURES

Page XX: Bomanska gården, Västerås. Photo: Anders Sundströms samling. Retrieved from: <http://www.anderslif.se/index.html-blogg0801.html> [2016-12-08].

Page XX: Kihlbergsgården. Photo: Unknown. Josef Kilberg AB. Retrieved from: <http://kihlberg.se/om-oss/> [2016-12-03]

Other pictures in the booklet belongs to the authors.



CHALMERS ARCHITECTURE

Master's Programme Design for Sustainable Development 2016/2017
HJO - Towards Resilient Urban-Rural Interactions and Transitions
Design studio part B / In-Depth Project
Jens Andersson, Sofie Granberg and Omar Zalloum
Co-Food Hjo - A Community Food Center