

Edible Kortenoord

Growing towards a circular neighbourhood



Management Report

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Management Report

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Figure 1. Front page, impression of edible Kortenoord

Table of Contents

1.	Introduction	2
2.	Theories and Methods	3
2.1	Theories	3
2.2	Methods	3
3.	Analysis of Wageningen	4
3.1	Food Agenda	4
3.2	Foodmap	4
4.	Analysis of Kortenoord	6
4.1	Foodmap	6
4.2	Demographics	6
4.3	Photo-Analysis	7
4.4	Interviews With Residents	9
4.5	Citizen Based Initiatives	9
4.6	Asset mapping	10
5.	The Future of Kortenoord	11
5.1	Vision 'Edible Kortenoord'	11
5.2	Zwanebos	12
5.3	Buurtschuur	14
5.4	Edible Streets	17
6.	Starting Groene Biep	19
	References	20

1. Introduction

World population continues to grow, resulting in an increase in food demand. At the same time urbanisation increases pressure on agricultural lands. Food systems have become separated. Food production mainly takes place on agricultural land in the countryside, while most food is consumed in urban areas. Processing, packaging, cooling, storage and (long-distance) transportation of food has resulted in a higher carbon footprint of food production and consumption (Wiskerke, 2015). Until recently, food policy never really was an issue on the urban agenda. Policy on food production was seen as a rural matter, not for cities.

However, the food demand from cities has enormous social impacts and physical impacts (Wiskerke, 2015). From that perspective, city food policy is really needed. Some cities have started working on food policy, such as Belo Horizonte in Brazil and New York in the United States.

The city of Wageningen also works on food policy and has introduced a food agenda, the Wageningse voedselagenda. This food agenda contains goals for more sustainable, healthy and accessible food, and to reduce food waste (Sibbing, Bruil, Hollenberg, 2021). In this report a vision based on the aims of the food agenda is made for the neighbourhood of Kortenoord.

The aim of the report is to inspire the municipality of Wageningen and residents to implement a more sustainable foodscape and connect society in Kortenoord. The first part of this management summary is about our analysis of the neighbourhood, in the second part our vision of the future of Kortenoord is explained.

2. Theories and Methods

2.1 Theories

For our design we used the social practise theory because it offers more insight in how changes in food practices could occur or disappear. A practise is a routinized type of behaviour whereby different elements are interrelated. The three elements that are helpful for understanding practices are materials, competences and meanings. Changes in practises can occur when the connections between these elements are made, sustained or broken (Shove et al., 2012). Our design consists of interventions that target the meaning of food, the materials involved and competences, so food practices can shift in more healthy and sustainable directions.

The Multilevel perspective is another valuable model for thinking about sustainable transition processes, such as food transitions. The MLP distinguish three analytical levels, the landscape, regime and niche levels (Geels, 2011). The socio-technical regimes are the established practices, institutions and rules that stabilize existing systems. The landscape, which is the external context which actors at the niche and regime level cannot influence in the short term. Niches are spaces where innovative activity takes place and where protection is offered from dominant rules.

This model argues that transitions come about through interaction processes within and between these different levels. Landscape could create pressure from top down which destabilizes the regime, and gives opportunities for niche innovations to replace the existing regime. This vision can be considered as occurring at a niche level.

The asset approach values the capacity, skills, knowledge, connections and potential in a community (Foot et al., 2010). The aim of this approach is to create a balance between service delivery and community building. Mapping assets is an instrument for underlining that the community and each person are equal partners in the 'whole system' and their resources are given equal value.

2.2 Methods

We used several research methods during our analysis and design phases. For our analyse we did a desk study, field trips, hold conversations with residents of the neighborhood, conducted interviews and went on an excursion to an ecovillage (Ppauw).

Observations

We visited Kortenoord twice. In the first week we visited the neighbourhood to walk around and explored the neighbourhood, we took photos and discussed the things we saw with each other. The second time we held short conversational interviews with some residents on the street. The goal of these short conversations was to gain more information about the eating and food habits of the citizens and their perspective on food. We also wanted to get to know what residents are missing in their neighbourhood and what they appreciate, so we could include this into the design.

Interviews

Besides the conversational interviews with local residents, we held two interviews with experts of local initiatives in the neighbourhood. One of the experts is a participant of Groen Kortenoord, which is a local residents' organisation, and works at Wageningen University. The second interviewee is a member of Groen Kortenoord and The Nieuwe Nu, which is another initiative that works on a more sustainable Wageningen. Both interviewees live in Kortenoord. Through these

semi-structured interviews we gained insights in the visions, current initiatives, and organisation of Groen Kortenoord and The Nieuwe Nu. We also discussed our initial design ideas with them, to explore what ideas had a potential to succeed and what ideas needed some adaptations.

Designing

After the analysis-phase we started working on the final design. This required several brainstorm sessions together. Based on the analysis, lectures, readings, excursion to the ecovillage, our past experience and discussions we made final plans and a design for the neighbourhood.

Inspiration

During this course we had the opportunity to go on an excursion to Ppauw, an ecovillage in Wageningen. The things we saw in Ppauw inspired us a lot. We all found it interesting to learn more about their way of living and thinking. For example how they have another way of seeing waste: how nothing is an end product and how things can be reused for other purposes. Furthermore, the communal place, where the people of Ppauw come together is the biggest building on the terrain. In this building there is a large table and a kitchen. This shows us again how big the role of food is in everybody's lives and how food has a very important social function.

We think we can use certain elements of Ppauw in our design for Kortenoord. For example how they grow Shiitakes on tree trunks, the food forest. Other elements are not (yet) suitable for Kortenoord, such as a compost place and biogas installation from kitchen waste. These elements do not fit in the neighbourhood because people might think negatively about it, for example because it could stink. However, Ppauw would be a place for a school excursion, where the children can get inspired like us.

3. Analysis of Wageningen

3.1 Food Agenda

In cooperation with 'Wageningen eet duurzaam' the municipality of Wageningen has created a food agenda to create a healthy, social and sustainable Wageningen. Because of poverty there is unequal access to healthy food, leading to social problems and diseases. The food agenda provides insights in existing food initiatives in Wageningen, sets goals for the future and combines food policy with other challenges the city faces. The municipality has formulated four main goals to educate, connect, access healthy food and reduce carbon emissions of food production.

1. Make healthy food options accessible and educate and connect people with social food events.
2. Help local initiatives to provide local, healthy food.
3. Limit food waste by making use of it and trying new solutions.
4. Inspire to eat more plant-based food and stimulate a dialogue to make local initiatives visible.

3.2 Foodmap

Within the municipality of Wageningen food is produced on several locations and in different manners. The city of Wageningen is surrounded by agricultural lands, except for the floodplains in the south. The Binnenveld area, located west and north of Wageningen, is a large agricultural area with mostly dairy farms. East of Wageningen food production is mostly horticulture based, accompanied by allotment gardens. In addition to the traditional farmers in the agricultural area of Wageningen, there are also relatively new food initiatives, such as pluktuinen. These are farms where members can pick fresh vegetables, fruit and/or flowers. Food production within the city is rather limited, except for edible trees that are planted throughout the city and private initiatives in gardens.

Food consumption is the dominant foodscape-related activity that takes place in the city of Wageningen. Apart from home, food can be consumed in restaurants, stores and bars throughout the city, although many are clustered in the city centre. Supermarkets are important distributors of food for the city and are therefore spread out throughout the city. Food waste processing does not happen in the city on a large scale and is therefore not included in the foodmap.



Figure 2. Streekwaar, a local initiative for fresh food (Streek-Waar, 2021)



Figure 3. Allotment gardens (Stöver, 2020)



Figure 4. High nutrient food consumption (Indiaretaling.com, 2020)

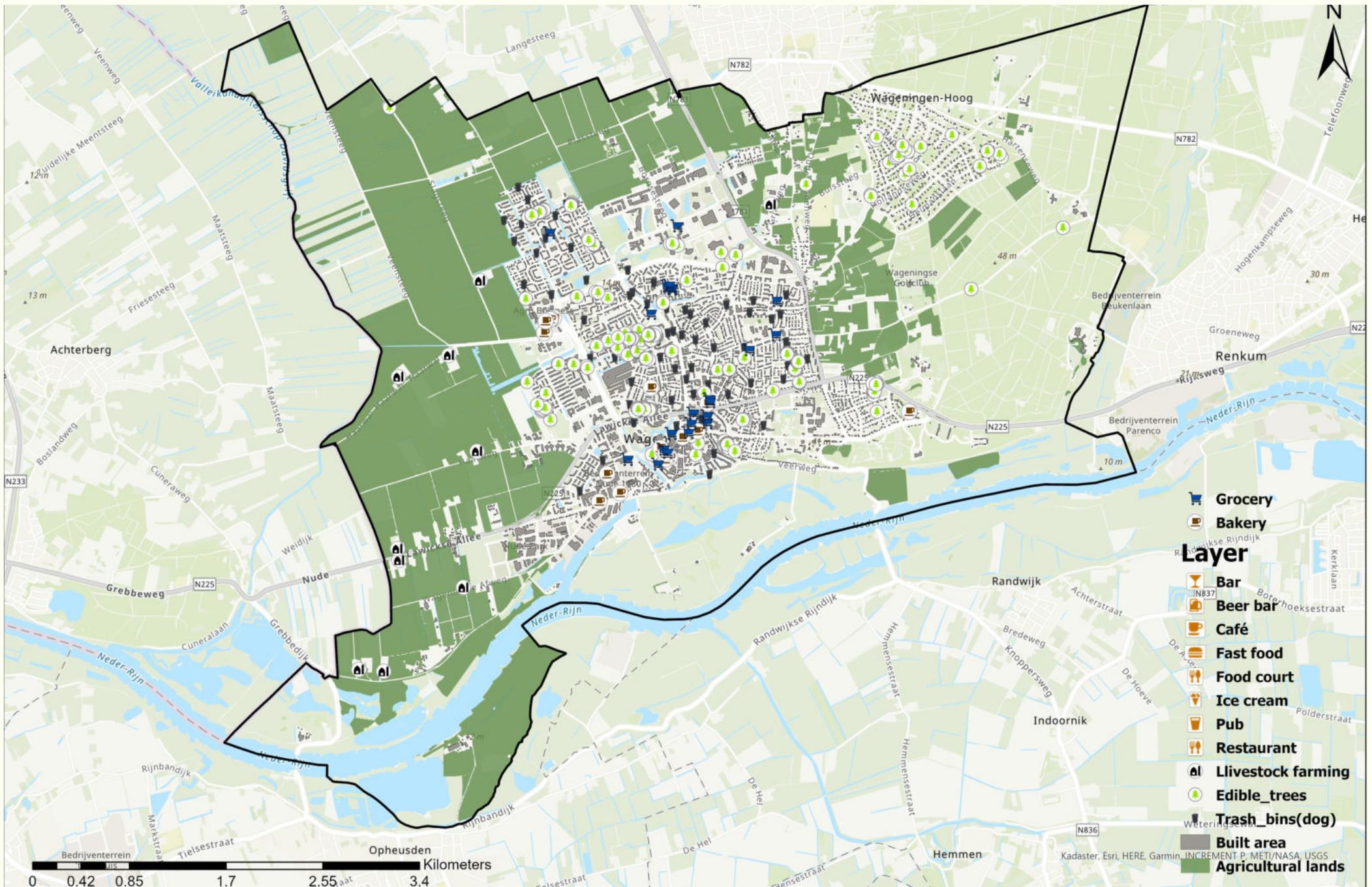


Figure 5. Foodmap of Wageningen

4. Analysis of Kortenoord

4.1 Foodmap

Food production in the neighbourhood of Kortenoord takes place on a very limited scale. Throughout the neighbourhood some edible trees have been planted in the public greenery. These are mostly apple trees and nut trees. In addition some residents have planted edible trees in their own backyards or have a small kitchen garden. Food production does take place west and north from Kortenoord in the Binnenveld area. Therefore, on these sides Kortenoord is surrounded by meadows used by dairy farmers.

Food consumption in Kortenoord can only take place at home, because in the neighbourhood itself there are no options to buy food. The neighbourhood lacks restaurants, bars and supermarkets. Close to the neighbourhood is a bar, but in general residents of Kortenoord have to go to other parts of Wageningen to eat outdoors. In the city of Wageningen the most important food source for residents is the supermarket. There are no supermarkets in the neighbourhood or relatively close to the neighbourhood. Some residents mentioned during the conversational interviews that the lack of facilities in the neighbourhood bothered them.

Food waste is collected by the municipal waste service. Kortenoord does have a composting facility, an initiative of Groen Kortenoord. This composting facility is however intended for garden waste and it is strictly prohibited to add food waste, because food waste might attract animals.

4.2 Demographics

The neighbourhood of Kortenoord is the newest residential area of Wageningen. Development of the neighbourhood has started in 2012 and is still ongoing. The dwellings that have been built since 2012 are all single-family homes. Because the neighbourhood has

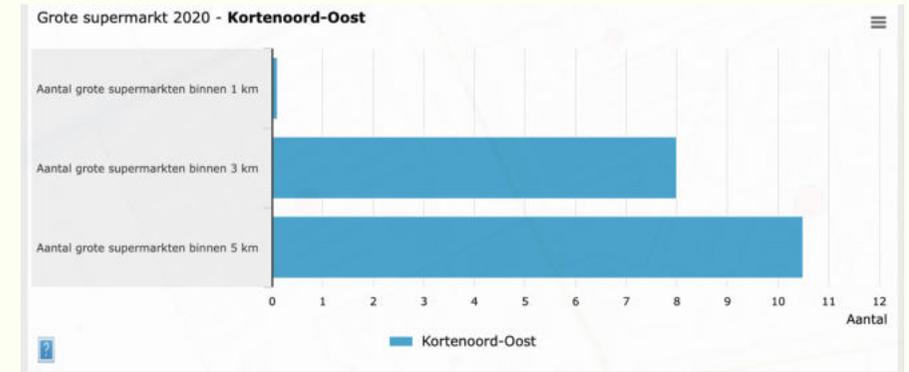


Figure 6. Access to large supermarkets from Kortenoord-Oost. (CBS, 2020).

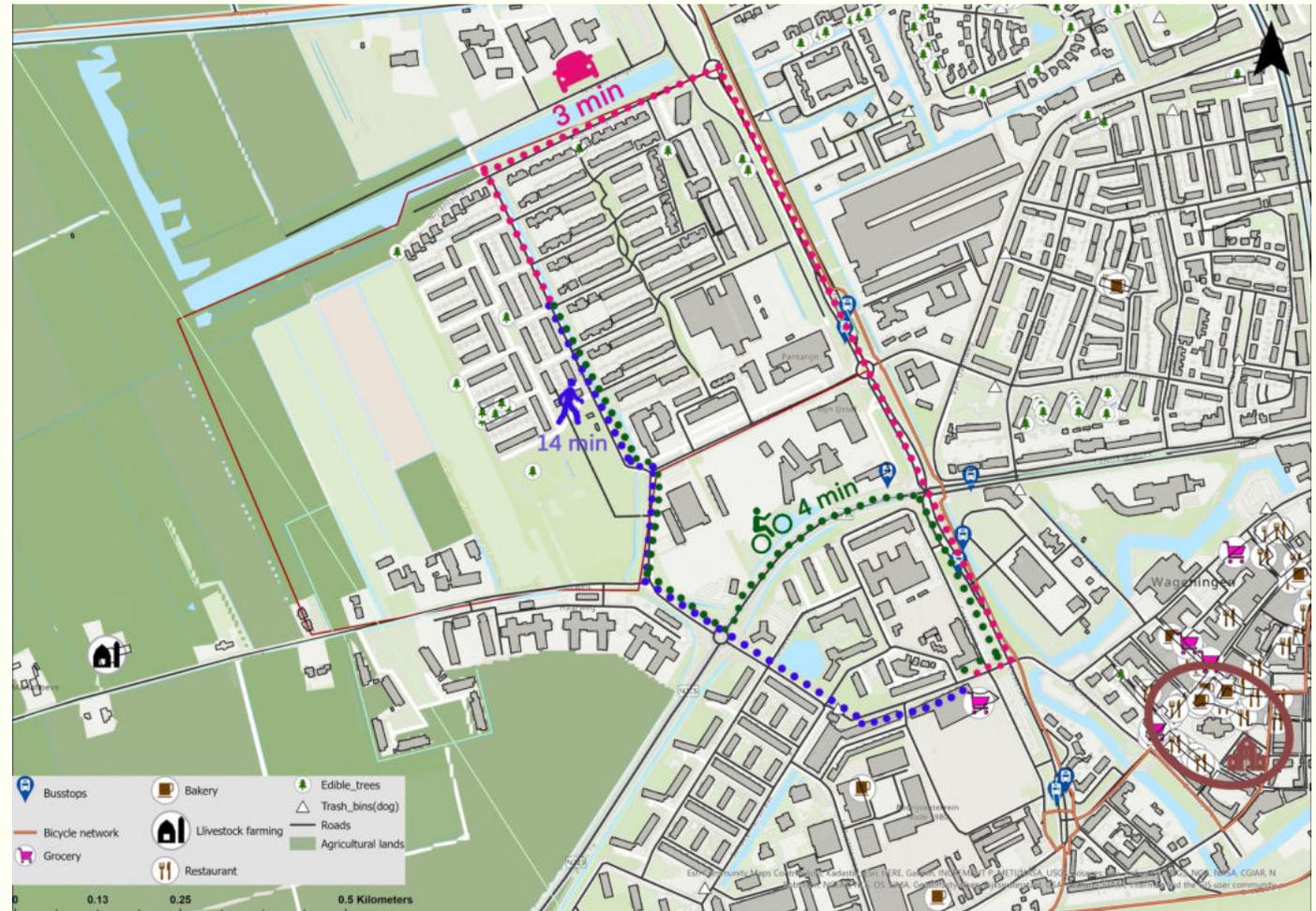


Figure 7. Foodmap of the neighbourhood Kortenoord

Edible Kortenoord: Growing towards a circular neighbourhood

expended over the past years, two student complexes and an apartment building at the Marijkeweg have become part of the neighbourhood as well. This means that the housing stock of Kortenoord exists of 99,5% single-family homes and 0,5% apartments (Gemeente Wageningen, n.d.).

because existing houses are relatively new and new houses are still being built in the neighbourhood, Kortenoord can be classified as a nieuwbouwwijk (new neighbourhood). Typically, a new neighbourhood exists of relatively much young residents. This is also the case for Kortenoord, with a high percentage of re-

sidents younger than 15 years old, and a high percentage of residents between 25 and 45 years old compared to the average of Wageningen. This can also be seen in the percentage of households with children. With 65% in Kortenoord, this is much higher than the average of Wageningen (19%) (CBS, 2020). However, it should be noted that the average of Wageningen can be disturbed because of the high number of students that form a single-person household. As can be seen in figure 2, the percentage of residents between 15-25 years old is much lower than the average of Wageningen (CBS, 2020). This could be because the amount of student housing in the neighbourhood is relatively low.

Around 25% of the residents of Kortenoord have a migration background. This is slightly lower than the average of Wageningen (28%) (CBS, 2020). During the conversations with residents in the neighbourhood, we were told that many of the residents of Kortenoord with a migration background work or study at the Wageningen University.

The amount of available statistics of Kortenoord is limited. We had to choose between a dataset that also

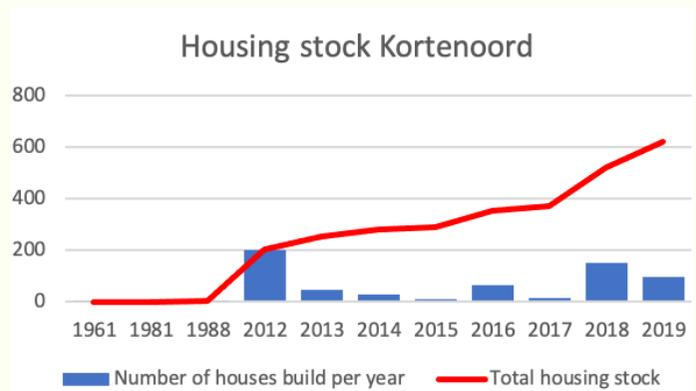


Figure 9. Age distribution residents Kortenoord-Oost compared to the average of Wageningen. (CBS, 2020).

included other parts of Wageningen or a dataset that only included Kortenoord-Oost, the newly built part of Kortenoord. We decided that using proper data was more important and only chose the data of Kortenoord-Oost. The consequence is that this data does not include two student complexes and a few residential apartments that are also in Kortenoord.

As mentioned before, the development of Kortenoord is not finished yet. A new school building for primary school De Zwaneridder still has to be built. Currently plans are being made, but the location for the school is already determined. The school will be located on the field between the forest, Frans Beijerstraat and Voorburglaan. The final design of the school and schoolyard still has to be determined.

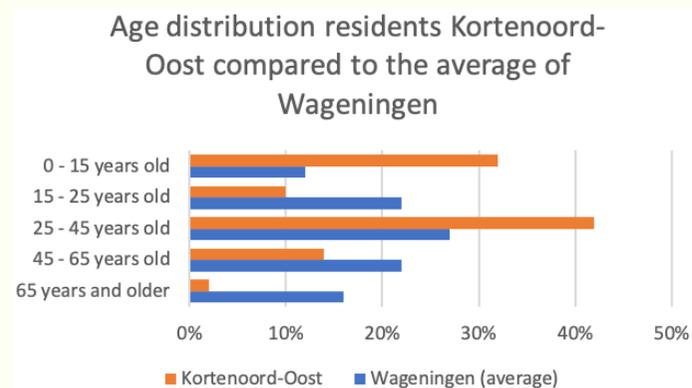


Figure 8. Housing stock of Kortenoord. Note that an apartment building is counted as 1. (Gemeente Wageningen, n.d.).

sideents younger than 15 years old, and a high percentage of residents between 25 and 45 years old compared to the average of Wageningen. This can also be seen in the percentage of households with children. With 65% in Kortenoord, this is much higher than the average of Wageningen (19%) (CBS, 2020). However, it should be noted that the average of Wageningen can be disturbed because of the high number of students that form a single-person household. As can be seen in figure 2, the percentage of residents between 15-25 years old is much lower than the average of Wageningen (CBS, 2020). This could be because the amount of student housing in the neighbourhood is relatively low.



Figure 10. Impression of the future school de Zwaneridder. (Nieuwbouw Kortenoord, n.d.)

4.3 Photo-Analysis

The new neighbourhood has a relative young population. How does this translate in the materiality of the spaces? Are residents already involved in initiatives to eat local and healthy food? By observing the neighbourhood the answers to these questions starting to reveal themselves.



Figure 11. Few access routes to adjacent rural hinterland.



Figure 12 and 13. Playgrounds and roadsides are open and show little biodiversity.

Figure 15 and 16. Waste bins are camouflaged behind hedges and in public spaces, contributing to a linear foodsystem.

Figure 18 and 19. Many gardens show individual small scale initiatives to grow food, producing and consuming themselves.



Figure 14. Public spaces are very open so children can play, they form green deserts with abandoned hedgerows or hawthorn bushes that look ill designed and maintained.

Figure 17. A large initiative is the compost place at the edge. Therefore this wastestream is hidden. Still this initiative

> Figure 20 and 21. Small flower gardens with edible trees in public space, while the space is much bigger. Small flower strips on roadsides also suitable for edible green.



4.4 Interviews With Residents

In addition to an analysis into demographics, a photo analysis, and a foodscape analysis, it is also necessary to understand how residents of Kortenoord experience their neighbourhood and to understand their lifestyles. Therefore, short conversational interviews with various local residents have been conducted, in order to create a complete overview of the experiences and opinions in and about Kortenoord. Given the short time available for these interviews, in total five residents were interviewed. The participants were randomly selected during a walk through the neighbourhood.

Most of the interviewees have been living in the area for several years, but only a few are aware of green initiatives. One interviewee even lives in front of a project for biodiversity. The people that were actually aware of the green initiatives in the neighbourhood were people who are outside often and people that are involved in green initiatives themselves.

Many of the interviewees do their groceries at large supermarkets in Wageningen. They go to the supermarkets by car or bike. An elderly person mentioned the local small supermarket Hoogvliet is too crowded these times to obly to the Covid regulations. Some of the interviewees go the weekly market in the city centre on Saturdays, but most do not. Most interviewees considered the price of food as the most important criterion when buying food, locally produced food and sustainable production were considered less important.

Although local production and sustainability of food are considered less important by the interviewees, all agreed education of sustainable food production to children is very important. We also interviewed some children, who told us that they almost never ate something direct from nature and prefer fast food instead.

4.5 Citizen Based Initiatives

In Kortenoord, there are two main bottom-up organizations that aim to create and improve the circular foodscape of Kortenoord and the direct surroundings. These bottom-up organisations are Groen Kortenoord and NieuweNu.

Groen Kortenoord

Groen Kortenoord is a residents' organization that tries to implement several small greening projects to increase biodiversity in the neighbourhood Kortenoord (Groen Kortenoord, n.d.). Groen Kortenoord was founded in 2019 by eight people who are very motivated and passionate about improving public green and biodiversity in the neighbourhood (personal communication, November 11, 2021). Groen Kortenoord is the organisation in the neighbourhood that has direct contacts with the municipality of Wageningen. In addition to biodiversity projects and managing contact between residents and the municipality, the organisation also organises events in the neighbourhood (such as a cutting exchange), and helps residents who want to start green initiatives, such as a Buurtgroen project.

A Buurtgroen project is an opportunity for residents to take over maintenance of a small part of the public green. Local residents can plant plants and are responsible for a large part of the management and maintenance.

The goal of Groen Kortenoord is to manage public green in the neighbourhood themselves through the Right to Challenge. This is a right of citizens to take over tasks from the municipality. A group of (organized) residents take over tasks from the municipalities if they think things can be done differently, better, smarter or cheaper. At the moment most of the greenery in Wageningen is managed by the municipality.

However, the municipality does not consider the speci-

fic needs of greenery in Kortenoord. Instead, the public green is maintained according to a schedule made by the municipality that does not take into account when it is best to do maintenance (personal communication, November 11, 2021). By taking over public green management, Groen Kortenoord can do maintenance whenever it is the best time to do it, and can also implement wishes of residents.

Groen Kortenoord started last year the initiative 'composting in its own neighbourhood'. On a small piece of land on the side of the Nijlantsinger garden, garden waste is collected and composted, which could be distributed again in the neighbourhood for use in the garden.

During an interview with an initiator of Groen Kortenoord the interviewee mentions that Groen Kortenoord still is a small organisation because due to covid the organisation did not have that much changes to present itself to the neighbourhood. In addition, the organisation does not have a building or room to have meetings and store tools. The interviewee foresaw an important role for the gardeners that in the future will take over public green management for management of food production in the neighbourhood. The interviewee thought that only with proper supervision food production in the neighbourhood could be a success (personal communication, November 11, 2021).

Nieuwe Nu

The Nieuwe Nu is a platform for all residents, landowners and (agricultural) companies in the Nude, which is a hamlet adjacent to Kortenoord (De Nieuwe Nu, n.d.). Together they discuss the future of the area, looking for small and large innovative ideas to make living and working in the Nude better and to create a beautiful and biodiverse landscape. The goal is to connect the different interests that exist in the area, such as growing food, generating energy, nature, living

and recreation. The Nieuwe Nu mainly focuses on the Nude area, but involves Kortenoord in some of their ideas as well, such as the Herenboerderij.

The Herenboerderij is an example of a project of Nieuwe Nu (De Herenboeren, n.d.). A group of people from Wageningen are looking at the possibility of starting a neighbourhood farm in the Nude. This could be done, for example, via the Herenboeren concept. In this concept, people from the neighbourhood lease land and start a farm. A professional farmer does the work so that continuity of the place is not jeopardized and the people can join on a voluntary basis.

With this concept it is possible to produce local food for a large group around 500 people on 15-20 hectare land. Local food, such as meat, eggs, fruit and vegetables will be harvested but this place becomes also a place where other initiatives, such as local regional markets, local products or activities take place. The area of the nude, next to the neighborhoods Nude and Kortenoord is seen as a suitable place for the farm.

4.6 Asset Mapping

We applied this approach to identify which residents, associations and organisations in a neighbourhood (who are they) have what skills, knowledge, experience, time, talents, or vision (what do they have or need

to develop) (Foot and Hopkins, 2010). This information is useful for changing interactions, assessing the community potential and bringing about community and



Figure 23. Assets for Kortenoord .



Figure 22. Herenboerderij (Volkstuindersvereniging Voorschoten, n.d.)

5. The Future of Kortenoord

5.1 Vision 'Edible Kortenoord'

From the analysis it has become clear that Kortenoord is a neighbourhood with lots of opportunities to improve the foodscape of the neighbourhood. Based on the analysis we made a vision for the future foodscape of Kortenoord.

Our vision focuses on food education and connecting residents of Kortenoord. Food education is really about inspiring residents in eating more local, sustainable and healthy food. Making healthy food accessible and inspiring people in healthy food choices will make the shift for residents to a healthier eating pattern easier. Food inspiration can be combined with our second goal, connecting society. Kortenoord is a very new neighbourhood which offers great opportunities to connect the residents. Social problems and food are approached as interrelated in the food agenda of Wageningen. Therefore we apply the same approach: food initiatives in the neighbourhood can contribute to connecting society and vice versa. In the end, people are stronger together and can inspire each other, exchange recipes and gardening tips. Food related events bring people together, and together people make a success of the events.

In this section our vision on the future of Kortenoord is explained. This vision consists of several elements that can be implemented separately. All elements focus on education and bringing people together, but some are more focussed on one goal than the other.

The elements

- A school/community garden (Zwanebos).
- A small community centre with a meeting room, food machine and tool library (Buurtschuur)
- A network of 'edible' streets (Eetbare Straat) and walking routes that connect with farms in the area.

Together they form our ideal vision for the future of the neighbourhood. By making the elements separately implementable, each plan can be made into a success before working on the next element. Lessons can be learned and adaptation is possible when necessary.



Figure 24. Visualisation of future Kortenoord.



Figure 25. Masterplan, showing all the elements.

5.2 Zwanebos

'Inspiring foods'

In 2022 a new school will be built in Kortenoord for primary school De Zwaneridder. This school uses the liberal-school concept, so in addition to regular courses like math and languages, attention is paid to crafts and nature. De Zwaneridder already makes use of a school garden at its current location and considers this as very important. Pupils in all classes learn about nature and growing food, and older pupils work in the school gardens (De Zwaneridder, n.d.).

Starting a school garden (Zwanebos) at the new school location offers great opportunities for De Zwaneridder and Kortenoord. The school garden functions as a community garden: the school can make use of it for education, while residents of Kortenoord can make use of it outside school hours, preferably coordinated by Groen Kortenoord.

Goals

- Education
- Inspiration
- Community building

Education

The community garden is not specifically intended for food production for the neighborhood. Instead, the garden serves several other functions. The primary goal of the garden is education. The school children are educated about gardening and food production. This has a snowball effect, as children share their experiences with their family. This has already resulted into pupils starting their own kitchen garden at home (De Zwaneridder, n.d.).

Inspiration

Secondly, the garden is visible for many residents of Kortenoord and can serve as inspiration for residents to start their own garden. More important however is

that the garden can serve as a social meeting point and makes Groen Kortenoord more visible. Outside school hours volunteers can help with gardening and meet each other.

Community building

By visibly working in the garden, Groen Kortenoord also becomes more accessible for people to ask questions about growing food or Groen Kortenoord. This way, the community garden can serve as a new social meeting point in the neighborhood.

Design intervention

The envisioned location of the school is next to a small forest and an open area. By planting edible trees and berry bushes in the forest, a food forest can be created: Zwanebos. Depending on the available space on the schoolyard a school garden can be created. In case there is not enough space in the schoolyard itself, the open space next to the forest can be turned into a



Figure 27. Potential location of the edible garden (Google, 2021)

< Figure 26. Visualisation of het Zwanebos.

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school garden.

The school garden is maintained by children of the school. Crops are divided among children who take them home, together with recipes matching the seasonal vegetables and fruits. Members of Groen Kortenoord are involved to help maintain the garden, explain about plants and lead excursions. The garden can be extended in time, for example by adding edible trees or greenhouses.

The size and exact location of the schoolgarden has to be defined, since the final design for the school itself is still unknown. An important criteria is that the school/community garden is open to public so both children and residents are able to make use of the place. This will help the garden to become an important edible hotspot in the neighbourhood where community is gathering and relations are established.

Assets

Cooperation between the school, municipality and Groen Kortenoord is required to choose the size and location of the garden. Also to search for needed material and financial resources and to make agreements about the construction and maintenance of the garden. Then the garden has to be made, what requires hard and green materials, volunteers and tools. Potential partners are therefore necessary. Also, to rise support for this initiative, an elaborate communication campaign is needed to raise awareness among residents. Then the school and Kortenoord have to figure out concrete methods to maintain the garden and divide its yields.



Figure 28. Community-garden (Volkstuindersvereniging Voor-schoten, n.d.)



Figure 29. School garden (OBS de Rietendakschool, n.d.)

5.3 Buurtschuur

'Lively and healthy community center'

The Buurtschuur (Community Shed) is an edible hot-spot where several functions come together, such as an organisational, social, information providing and educational function. The Buurtschuur provides a place for a lively community center where food is one of the general themes. It is a physical space where residents can come to buy sustainable food, go on excursion, learn about healthy food and connect with each other.

Goals

- Coordination of initiatives
- Provide healthy food options
- Tools
- Connection
- Learning

Coordination of initiatives

First of all, the Buurtschuur will be the central point for coordination. After holding the interviews, it became clear that Kortenoord is missing a place from where the maintenance of greenery can be coordinated. In our vision the maintenance of edible green is extended throughout the neighbourhood. However, providing such a foodscape is only possible when it is organized and supervised very well (personal communication, November 11, 2021). Most important, the Buurtschuur provides initiatives, such as Groen Kortenoord, a place where meetings can be held.

Provide healthy food options

Another important function of the Buurtschuur is to provide food over the neighbourhood. In our vision every citizen should have the opportunity to buy fresh healthy local food. Also citizens who do not have the time to harvest food themselves or have time to go to the nearby farms. We want to make sure that the food produced in Kortenoord is distributed in Kortenoord



Figure 30. Visualisation of the Buurtschuur.



Figure 31. Food shop (Kluin, 2014)



Figure 32. Excursion (UC Santa Cruz, 2016)

and that no food is wasted. In order to realise this, we have included a food vending machine in our design. People can get food at any time. The food machine will sell local products from the farms, vegetables coming from the foodscape in Kortenoord themselves and bread from the baker academy.

Tools

Citizens are encouraged to start or help with green initiatives. However, for the maintenance of greenery is, besides motivation, time and knowledge also resources needed such as equipment. The people in Kortenoord can borrow these equipment at the Buurtschuur.

Connection

The Buurtschuur is also the meeting place for the neighbourhood. At this place people can meet and talk to other citizens. For example when they pass by to buy food, when they have a meeting or when there is an event. The Buurtschuur is also a meeting place where excursions and routes to the farmers start. This will increase the social cohesion in the neighbourhood. Also, with the Buurtschuur Groen Kortenoord will be more visible for the neighbourhood, so that people know where to go with questions, complaints or when they need some help.

Learning

Other functions are education and information. Events are held here on a regular basis such as bio cooking events, workshops to grow your shiitake mushrooms, annual yield fests and a place for the cutting (stekjes) exchange marketplace. Besides the workshops and excursions, information will be available so that children (and adults) can learn how the food is processed, who the farmers are, how the bread is being made, where milk is coming from. There are also different kinds of educational games available. It is an interesting place where children can entertain and educate themselves. This also strengthens the relationships between pro-



Figure 33. Visualisation of the lively center in the neighbourhood: The Buurtschuur.

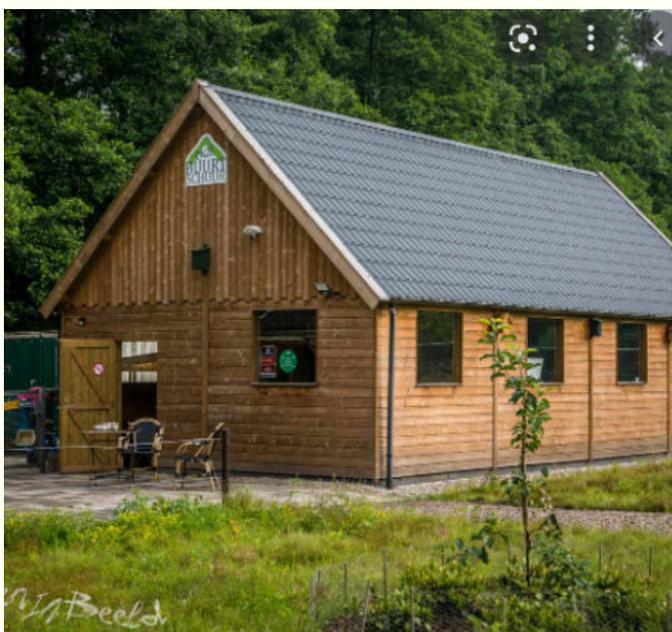


Figure 34. The Buurtschuur (Assen in Beeld, n.d.)



Figure 35. Food themed event (themanlyfig.org, n.d.)

ducer and consumer and it creates awareness among the children.

Design intervention

All those different functions come together in the Buurtschuur. The appearance of the building itself is nature inclusive but also fits within the identity of the neighbourhood (for example the style of the building is neat). Inside the building there is a room for meetings and for the tool library. The food machine is situated outside the building, so people can get the food 24/7.

Around the Buurtschuur there is enough space for events. There are picnic tables so people can sit and chat while the children are enjoying themselves.

Assets

In order to achieve the Buurtschuur different connections and resources are needed. First of all, building a Buurtschuur and the tool library costs money. The municipality and subsidies should help with that. Besides, connections with farmers and the bakery school are needed. Someone needs to invest time to collect the food for the food machine and farmers should be open for excursions.



Figure 36. Design plan for the Buurtschuur.

5.4 Eetbare Straat

'Small change big impact'

Kortenoord is a new sustainable district with a significant amount of built-up area. It is important to create a nice, green, sustainable neighborhood. Where food, colorful and (bio)diverse greenery, education, mutual connection and being able to learn from each other is very common. To achieve these goals, it's important to create a Food streets network and use every free meter of the neighborhood.

The district is partly located on a former WUR site with some remnants of old plants with lawns. What benefit do lawns provide us with anyways? They don't attract bees, are a lot of effort to maintain, and generally require a lot of pesticides and fertilizers to keep the pests out and the grass growing lush and green. The main idea is to create a Food streets network with various seasonal fruits, vegetables, herbs, and spices.

Fruit trees and vegetable planters can be placed in the middle of the food street, which contribute to the healthy street scene and will create an attractive outside area. Everyone can contribute what he or she wants according to the skills and time they have. To contribute to the creation of a meeting place for tea-break or meal, benches can be placed around the trees to facilitate seating for meeting your neighbours. Working and resting together as a community can have many benefits for everyone involved, not to mention, in this case, the free food!

Goals

- Human connection
- Provision healthy food
- Connection with nature
- Increasing health and well-being
- Stop and rest

Human connection

Encouraging people to come together for a common goal, get out of the house, and get to know the neighbours. Meeting your neighbours here whilst gardening in the boxes can shape new connections and can improve healthy eating and living. This place will connect a wide diversity of people and plants. To contribute to the creation of a meeting place for tea-break or meal, benches can be placed around the trees to facilitate seating for meeting your neighbours.

Providing healthy food

"One of the problems with cooking is you never have the herbs you need at 8 o'clock at night, but now we have the neighbourhood, and you just go down and you just take whatever you need for that meal" said participant of Urban Food Street project in the Queensland suburb of Buderim. Kortenoord is able to provide the growing, sourcing, and eating of fresh organic foods.

Connection with nature

Greenery has a cooling effect on the warming in the neighborhood. Trees also dampen noise, creating a quieter environment. Green also has an important function as water storage and purification. The use of organic methods of Food streets maintenance is obligated. Greenery not only improves the quality of the neighborhood but also improves the surrounding environment.

Increasing health and well-being

Being outside and doing physical activities will increase your health. The close location of affordable food also keeps a car off the road, makes it easier for the meal, and it's also healthier because you're walking. That's what the neighbourhood is about: walking and engaging.



Figure 37. Edible plants in boxes (Story, 2014)



Figure 38. Boxes at the roadsides (growingedibles.blogspot.com, 2012)

Stop and rest

can help residents transition from the hustle and bustle of the city to the serenity and calm of the community place.

Assets

In order to create the Green streets cooperation between inspired residents and community associations (Green Kortenoord) are needed. First of all, it's important to find convenient places to create Green streets. For instance, public squares, green areas around children's gardens or even space close to the road can be used for this, because gardening boxes don't need a lot of space. Then the gardening boxes have to be made, which requires hard and green materials, volunteers and tools. Then residents, using their knowledge, skills and passion have to maintain them and at the end divide it's yields.



Figure 39. Visualisation of edible boxes in the parks of Kortenoord.

6. Starting: Groene Biep

'The first edible hotspot'



The total budget is €1500,-. Divided by four groups results in a budget of 374 euros. With that, we will built the Groene Bieb (Green Library)!

We got the opportunity to come up with an idea that could actually be implemented in the neighbourhood due to a budget that the municipality made available. We found it important to come up with an intervention that will stimulated a healthy food environment in Kortenoord. An intervention that will encourage the citizens to eat more local, sustainable and healthy. An intervention that will stimulate citizens to grow their own food. For 375 euro we will place a Green Library in Kortenoord. This is a place where people can exchange plants, cuttings and seeds. We have chosen for this idea because it is original, feasible, inclusive and for the longer term. Besides, this idea connects to, and builds upon, an already successful event (Stekjestocht) that Groen Kortenoord have organized in the neighbourhood.

Besides our idea target the meaning, competences and materials, which are the elements of a complete practise. Material is covered because the Green Library provides a place where the citizens of Kortenoord can go to get plants, cuttings and seeds that others have put there, and a place where citizens can meet each other and where they can get their recipes to make food. Our idea covers also competences needed, because citizens can learn about plant care basics, seasonal vegetables and how to prepare food. Lastly, the meaning behind the Green Library is social, well-being, educational and creating awareness of eating local healthy and sustainable food. This way, the Groene Bieb will plant a seed in the mind of residents, a starting point for a healthy food environment in Kortenoord



Figure 40. Smallest version of the Biep (nudge, n.d.)



Figure 42. Second option for the Biep (Buiten-Goed, n.d.)



Figure 41. A starting point for the edible hotspot (Buitenlevengevoel, n.d.)



Figure 43. Potential location of the Groene Biep, next to the current location of the Compost place. (Google, 2021)

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Edible Kortenoord

Growing towards a circular neighbourhood

'Planting the seed'