How well do you know our region?

C: Intervention and interaction "Region“	Preparation time	Requirements	Duration
By constructing their region, students gain an overview of their region / living environment. They explore their region and get to know food producing, processing, distributing and disposing companies as well as the flow of goods of the local food system. They also investigate the question of who lives and consumes in the region. They ask themselves questions and construct a model of their food supply structure in the classroom: **1. What does regionality mean to us?** **2. How many people live in the region and how is the population composed?** **3. Where does our food come from?** **4. Which farms are there in the region?** **5. Which food is there in the region and how is it produced?** **6. What is not available? Black box' - where is the origin not traceable?** **8. What could have been procured regionally from the 'black box'?** The learners are enabled to make reflected, knowledge-based consumer decisions.	180min	★★★☆	10 TU

Competence-oriented learning outcome:
UF1.2.C I can interpret figures, data and facts about agriculture and make conclusions. UF1.1.A I can explain the national economical importance of agriculture.
Aim of the teaching sequence in the module:
Providing an overview of the region and getting to know actors in the local food system (s)
Learning outcome
Model of the food system of the home region Learning diary
Required materials/media:
Slide/poster Digital map, 2-dimensional base map of the region Materials for the region model Postcards from the region, Tasks for group work Learning diary

How well do you know our region?

Phase	Duration in min	Social-setting	Materials/ Media	Methodical-didactical notes / implementation
Confrontation	**15**	**PL**	**Questionset**	Students are confronted with sensitizing questions that are intended to make them aware that they do not really know their immediate surroundings.
Reconstruction	**50**	**PL**	**Base map, materials for the model construction**	Students should create a model of the region in the classroom based on their knowledge. On the basis of their favourite food and its ingredients, this model should show producers, processing companies, distributors, consumers and waste disposal facilities. They consider flows of goods and activate the black box in which LM with an ambiguous origin are deposited.
Intervention/ Interaction	**350**	**GW**	**Postcards, tasks for group work**	Based on these assumptions, the learners receive research tasks concerning the local supply chain and the overall situation of the region. Based on the questions (see front page) they have to research demographic data, companies, consumers, etc. of the local food system. For this purpose, depending on the available teaching time, excursions, farm visits, official visits, good practice farms (possibly beyond the region, which create visions), etc. can be visited.
Deconstruction	**50**	**PL**	**Region modell**	Students adapt the region and represent the ACTUAL situation. This gives them an overview of the actors in their region and enables them to identify what is missing to ensure supply.
Reflection	**35**	**PL / IW**	**Learning diary**	Students draw conclusions about how to optimize future purchases of food from their favorite dish. The additional units / learning sessions (C1- C7) offer further learning opportunities based on the criteria for sustainable nutrition depending on the available teaching time.

IW: Individual work; PL: Plenum, GW: Group work;

Planning of a systemic learning activity on local sustainable food systems

Element/Topic

C: Intervention and interaction "Region" / How well do you know our region?

Name(s)

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Learning activity plan -

1 Learning Module

1.1 Overview

Element/Topic	C: Intervention and interaction "Region" / How well do you know our region?
Curricula/Competences	UF1.2.C I can interpret figures, data and facts about agriculture and make conclusions. UF1.1.A I can explain the national economical importance of agriculture. SPK 1.4.1.B I can contribute to shaping areas of social life. SPK 1.5.1.B I can shape my personal environment according to my own knowledge and possibilities. SPK 3.1.1.B I can contribute to a group with my own resources and skills.
Learning objectives	Providing an overview of the region and getting to know actors in the local food system
Learning outcomes / Competences of professional subject-related learning	• I can put different definitions of regionality into relation to each other and work as a team to define 'our region'. • I can identify the origin of food using food labelling and visualize food flows in the 'region model'. • I can survey the production, processing and distribution of food in agricultural or commercial enterprises in the region and estimate their food quantities (t, kg, ha, etc.). • I can research the socio-demographic data of the population of my region and present it in the form of descriptive graphics. • I can determine the waste quantities of the region and research the methods of waste disposal. • I can identify companies/actors in the local food supply chain and present them in a 'region model'. • - I can classify the ingredients of my favourite dish (from A: Confrontation) into local and national/international ingredients according to their origin.
Learning outcomes / Competences of the methodical, social and personal area	• I can contribute to shaping social areas of life. • I can shape my personal environment according to my own knowledge and possibilities. • I can use my own resources and skills in working with a group. • I can reflect my consumption and purchasing behavior in a fact-oriented way.
Schedule	500 Minutes / 10 Units of Leaning

1.2 Learning activity planning

Phase in Module (GP)	**When?** Guideline	**What for?** Learning objectives, partial competences	**What?** Detailed learning steps incl. technical questions/explanations/contents	**How?** Methodical procedure; learning outcomes learning materials	**Who with whom?** Social learning Role of teacher	**What with?** Media, Equipment Resources
Confrontation	*15 minutes*	*Introduction to the lesson topic* *I can put different definitions of regionality into relation to each other and work as a team to define 'our region'.* ***To create motivation to learn more about the region***	Teacher welcomes students and introduces the title of the lesson sequence. With the help of initial questions, students are sensitized to the fact that they do not know their immediate surroundings (assumption). - What does "our region" mean to you? - Which food producing or processing companies are there in our region? - What food from the region is available and what do you buy? - Where do you purchase? The main conclusion of the confrontation phase is that we need to learn something about the region in which we live! Negotiation process: Students agree on the geographical boundaries of the region, with the support of the teacher.	Discussion Teacher opens and facilitates the discussion of questions, collects and clusters answers from students Teacher shows a map of the region. Depending on population and infrastructure the size is defined.	Social form: Plenary session Teacher: Moderator Results backup Teacher guides the decision-making process	Slide with questions card / pin-board or Flipchart Digital map

Phase in Module (GP)	**When?** Guideline	**What for?** Learning objectives, partial competences	**What?** Detailed learning steps incl. technical questions/explanations/contents	**How?** Methodical procedure; learning outcomes learning materials	**Who with whom?** Social learning Role of teacher	**What with?** Media, Equipment Resources
Reconstruction	*10 Minutes* *15 Minutes* *25 Minutes*	*I can classify the ingredients of my favourite dish (from A: Confrontation) into local and national/international ingredients according to their origin.* *I can identify the origin of food using food labelling and visualize food flows in the 'region model'.*	Construction of the region model in the classroom on the basis of the students' level of knowledge: Starting with the favourite food and its ingredients (cards), the group (from session A and B) locates and researches producers, processing companies, distributors, consumers and waste disposal facilities. These are then represented in the region model using the materials. They consider flows of goods and activate the black box in which food with unknown origin or international origin is deposited. Joint control of the assignment of the "Actors" in the region model and discussion of possible flows of goods.	Present base map of the model region Learners consider representation in the region model Groups present their results and complement the model	Plenary session Group work Plenary session Teacher is the moderator during the whole sequence	2-dimensional base map of the region Ingredient cards/packaging from learning session B: Reconstruction Materials for the region model

Intervention / Interaction	*50 Minutes* *300 Minutes*	*I can classify the ingredients of my favourite dish (from A: Confrontation) into local and national/international ingredients according to their origin.* *I can identify the origin of food using food labelling and visualize food flows in the 'region model'.* *I can survey the production, processing and distribution of food in agricultural or commercial enterprises in the region and estimate their food quantities (t, kg, ha, etc.).* *I can research the socio-demographic data of the population of my region and present it in the form of descriptive graphics.* *I can determine the waste quantities of the region and research the methods of waste disposal.* .	Introduction to the tasks and group formation Research assignments: **'Who produces, processes, distributes, consumes and disposes of food in the region? ´** Students determine the situation along the supply chain in groups and try to present the results in the regional model: **Group 1: Food producers** How many companies/farms are there in the region that produce food for sale? What/how much do they produce and who works on the farm? Under what conditions do the farms produce food? To whom/where is the food sold? Are there good practice farms? **Group 2: Food processing companies** How many companies are there in the region that process food? What do they process? What quantities do they process and how many employees do they have? Are there any good practice companies? **Group 3: Distribution (stores, markets, platforms, pleasure hut, etc.)** Where can regional food be bought in the region? Who sells, producers or third parties? Who generates the added value? What regional products do they sell? **Group 4: Consumers** Who lives in the region? What is the age and gender distribution and occupations? How do people live in the region? (households, places of residence, ...) Who is employed, what income is earned? (All sociodemographic data) **Group 5: Waste disposal companies** What disposal systems for garbage and food waste are there in the region? Is anything recycled/composted? Is there energy generation from waste? Where is our waste stored or processed? How much waste is produced in the region?	Group formation by post cards Learners receive a written task description. This contains the topic, questions and contact persons or links. The research is carried out independently in a team and the questions will be answered in written form. Considerations for the demonstration of the results in the region model are made and agreed with the teacher.	Group work: depending on class size and distribution of farms and companies in the region, group sizes may vary. The workload should be as balanced as possible. Teacher plans the division and leads the group formation processes. During the group work phases, individual supervision is provided by the teacher.	Postcards from the region - topic is written on the reverse side tasks for the group work

Phase in Module (GP)	**When?** Guideline	**What for?** Learning objectives, partial competences	**What?** Detailed learning steps incl. technical questions/explanations/contents	**How?** Methodical procedure; learning outcomes learning materials	**Who with whom?** Social learning Role of teacher	**What with?** Media, Equipment Resources
Deconstruction	*50 Minutes*	*I can identify companies/actors in the local food supply chain and present them in a 'region model'.*	Region model is creatively modified in the classroom with the results of the group work.	Afterwards the visualization in the model takes place. Students present their results.	Teacher chairs the extension of the region model	 Materials for the construction of the model region
Reflection	*35 Minutes*	*I can reflect my consumption and purchasing behavior in a fact-oriented way*	Students draw conclusions in the plenary session on how to optimize future purchases of food of their favorite dish. Learning diary: The learners take pictures of the current version of the region model using their smartphones. They then answer questions: - How did I perform in the group work? - Which of my strengths could I contribute? - Which aha-experiences did I have during the learning process? What surprised me the most? What are my most important insights? - What impact does the learning experience have on my personal purchasing and consumption behavior? What do I intend to do? What arguments do I find for myself and others?	Discussion Written reflection in the learning diary.	Teacher initiates plenary discussion Teacher encourages to individually answer (IW) questions in the learning diary.	 Learning diary

The additional units / learning sessions (C1- C7) offer further learning opportunities based on the criteria for sustainable nutrition depending on the available teaching time.

1.3 Sources:

For the printout of the region Google-Maps https://www.google.at/maps can be used. Digitally, the region could also be designed with the program: https://www.mural.com/ .

Basic considerations about teaching and learning

2 Didactical analysis

2.1 Pre-knowledge/pre-concepts/pre-experience

For this learning setting, the entry requirements are the completion of the learning settings A: Confrontation and B: Reconstruction. In this way the learners have already experienced and reflected their personal attitude towards their favorite dish and their shopping behavior. Thus, in this learning setting C: Intervention/Interaction, a concrete reference can already be made to pre-concepts and previous experiences of the learners.

2.2 Didactical and methodological considerations

2.2.1 Importance of the educational content for the learners

This learning session offers students the opportunity to get to know their surrounding region and the players in the food supply chain.

It enables them to make reflected, knowledge-based consumption decisions.

Consumer behavior influences how food is produced and thus also how the environment will be developed. In this respect, this learning approach is of great importance for every learner, both in the present and in the future.

2.2.2 Didactic Reduction / Didactic Focus

The pedagogical focus in the learning session must be chosen by each teacher in such a way that the learning content is manageable according to the available lesson time.

How large is the region that learners want to explore? This should not be planned too large. The teacher has to agree on a size definition in advance of the learning sequence in order to be able to prepare sufficiently the necessary materials for the construction of the model and to avoid overstraining the learners in the learning process.

Furthermore, the teacher must have an overview of who the actors are along the supply chain of the region. For this purpose, they should have already answered for themselves the questions of the intervention phase of the learning session in order to be able to adequately guide and support the learners.

The sources or contact persons for the research must be provided by the teacher. The scope of the research has to be defined exactly by the teacher, so that the tasks can be adapted if necessary.

Further units (C1-C7) can be connected to this learning session C: Intervention/Interaction depending on the students' interest in the subject matter or the circumstances of the region.

2.2.3 Aspects of individualization and differentiation

Depending on class size and spread of farms and enterprises in the region, group sizes in the intervention phase may vary. The workload should be as balanced as possible.
The teacher leads the group building process. The distribution of tasks within the learning groups should be negotiated by the learners themselves based on their strengths.

When building the region modell it should be ensured that all groups can present and demonstrate their results sufficiently. The chairing of the teacher plays an important role in this regard.

2.2.4 Performance review, result assurance, assessment

The following learning outcomes are used to assess performance in the subject matter using criteria-based assessment sheets:

Collective assessment of group work regarding:
- Correctness of content, completeness
- Creative demonstration of the results and visualisation in the model
- Presentation of the results
- Independence of the team in the working process

Individual assessment of the learning diary entry:

2.2.5 How is personal learning progress reflected and documented?

Learners reflect on the learning process by keeping a learning diary on the following questions:
- How did I perform in the group work?
- Which of my strengths could I contribute?
- Which aha-experiences did I have during the learning process? What surprised me the most? What are my most important insights?
- What impact does the learning experience have on my personal purchasing and consumption behaviour? What do I intend to do? What arguments do I find for myself and others?

3 Annex to the learning activity plan

3.1 Medias

Slide with questions for the discussion in the confrontation phase
Cards/pinboard or flipchart, standard presentation material

-What is "our region" for you?
-What food producing or processing companies are there in our region?
-Which regional food products are available and which ones do you buy?
-Where do you do the shopping?

Digital map of the respective region - ev. internet access
2D document of the region (depending on the size of the region, a double or triple A0 format can be glued together, where the base map (google maps / goolge earth) of the region is already printed, or graphically represented by the learners or the teacher)

Materials for the model of the region

Symbol cards (size approx. A5) for the different enterprises/institutions:
1. "production companies"
2. "Processing companies"
3. "Distribution companies"
4. " Local authority office"
5. "Waste disposal companies".

These cards can be placed on small wooden feet and placed in the model.

Blackbox - Box or shoe box: paint black or paste with black paper;

Ingredient cards/packaging from learning session B: ´Reconstruction`

Postcards from the region (- on the reverse side is the topic) for the group assignment
[To do for the teacher: get postcards or photos from the region and cut them into pieces according to the class size. When dividing the groups, the different work intensity of the tasks should be taken into account].

Work assignments for group work **'Who produces, processes, distributes, consumes, and disposes of food in the region? '**

Group 1: Food producing companies
As part of our project "A look beyond the horizon: Our region - our food - our future", you will gather information about your region. To do this, you and your team colleagues will research the following aspects and get to know actors from one area of the food supply chain better:

How many farms/companies are there in the region that produce food for sale? What/how much do they produce and who works at the farm/company? Under what conditions do they produce food? To whom/where is the food sold? Are there good-practice-companies?

[To do for the teacher: At this point, information must be provided for the learners on where they can find information on the questions. This could be, for example, websites or institutions representing the interests of agriculture].

Create a farm description for each or for selected farms of different production sectors for the regional model. Use the given cards for "production companies" for this.

[To do for the teacher: At this point the time available must be announced. Optionally, this task can be completed as homework by the learners].

Group *2: Food processing companies*

As part of our project "A look beyond the horizon: Our region - our food - our future", you will now gather information about your region. To do this, you and your team colleagues will research the following aspects and get to know actors from one area of the value chain better:

How many companies are there in the region that process food? What do they process? What quantities do they process and how many employees do they have? Are there good practice farms?

[To do for the teacher: At this point it is necessary to provide information for the learners where they can find information about the questions. This could be, for example, websites or institutions representing the interests of the region or the economy].

Design a company description for each or for selected food processing companies of different products for the region model. Use the cards provided for "processing companies" for this purpose.

[To do for the teacher: At this point the time available must be announced. Optionally, this task can be completed as homework by the learners].

Group *3: Distributors (stores, markets, platforms, gourmet- huts, etc.)*

Within the framework of our project "A look beyond the horizon: Our region - our food - our future", you will now gather information about your region. To do this, you will research the following aspects with your team colleagues and get to know actors from one area of the food supply chain better:

Where can regional food be bought in the region? Who sells, producers or third parties? Who creates the added value? What regional products do they sell?

[To do for the teacher: At this point it is necessary to give information to the learners where they can find information about the questions. This could be, for example, websites or institutions representing the interests of the region or the economy].

Create a company description for each or for selected grocery stores for the region model. Use the given cards for "distribution companies".

[To do for the teacher: At this point the available time has to be announced. Optionally, this task can be completed by the learners as homework].

Group *4: Consumers*

As part of our project " A look beyond the horizon: Our region - our food - our future", you will gather information about your region. To do this, you and your team colleagues will research the following aspects and get to know actors from one area of the food supply chain better:

Who lives in the region? What is the age and gender distribution and occupational groups? How do people live in the region? (Households, places of residence, ...)

Who is employed, what is their income?

[To do for the teacher: At this point, information must be provided for the learners on where they can find the socio-demographic data. This could be, for example, websites or institutions in the region, such as the municipal office or the district administration].

Design an overview for the region model using the given map "Municipal Office."

[To do for the teacher: At this point the available time has to be announced. Optionally, this task can be completed as homework by the learners].

Group *5: Waste disposal companies*

As part of our project " A look beyond the horizon: Our region - our food - our future" you will now gather information about your region. To do this, you and your team colleagues will research the following aspects and get to know actors from one area of the food supply chain better:

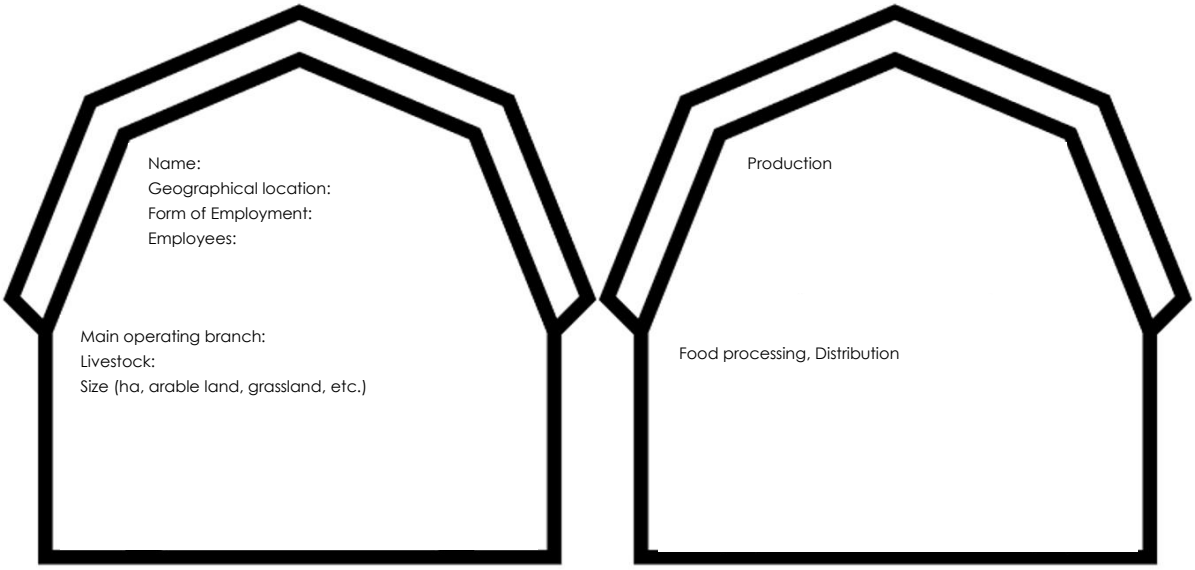
What waste and food waste disposal systems exist in the region? Is anything recycled/composted? Is there energy generation from waste? Where is our waste stored or processed? How much waste is generated in the region?

[To do for the teacher: At this point, information needs to be provided for the learners on where they can find information on the questions. This could be, for example, websites, telephone directories, or institutions of the region or economy].

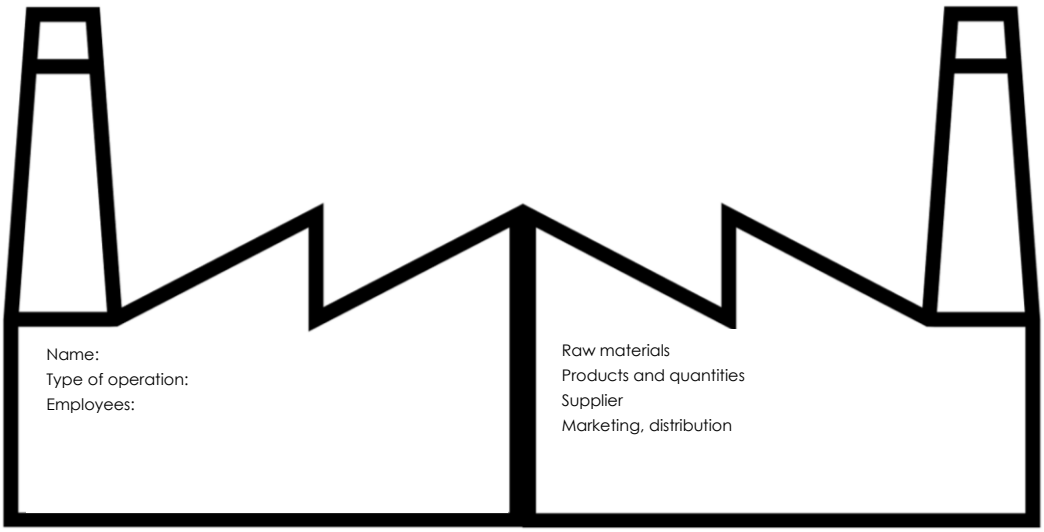
Create a description of each waste management company for the regional model. Use the cards provided for "waste disposal companies" for this purpose.

[To do for the teacher: At this point the available time has to be announced. Optionally, this task can be completed by the learners as homework]

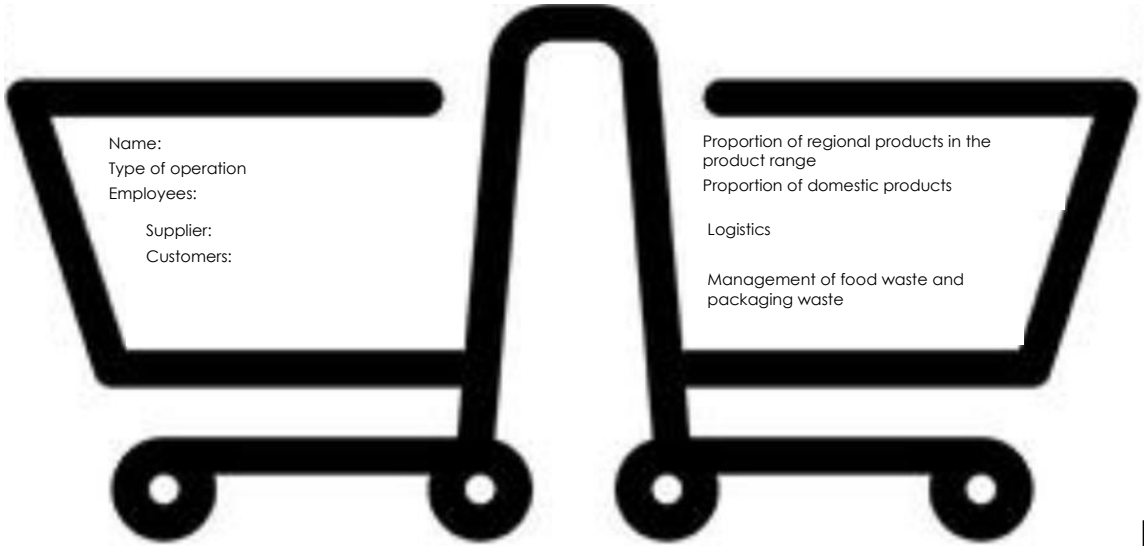
Card: Producting companies and processing companies

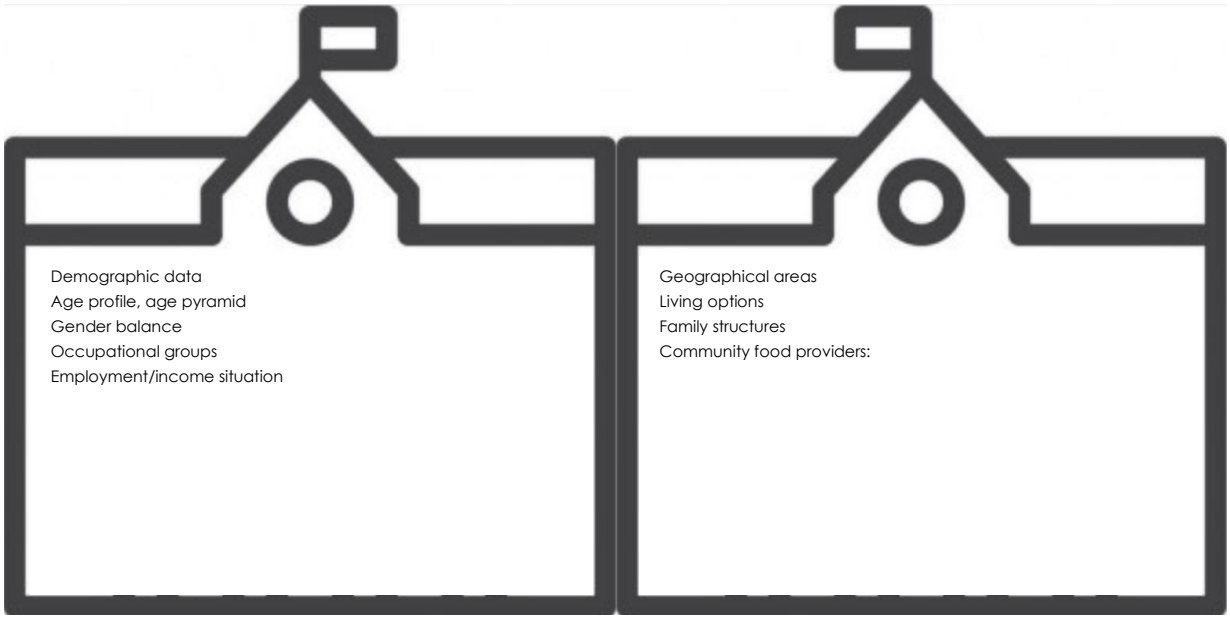


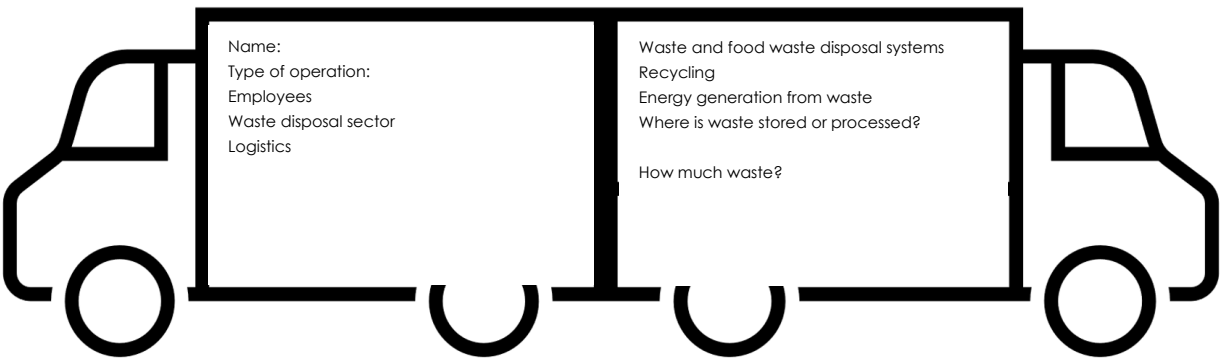
Card: Processing companies



Cards Distribution companies, Municipal Office and Waste disposal companies







Learning Diary

- How did I perform in the group work?
- Which of my strengths could I contribute?
- Which aha-experiences did I have during the learning process? What surprised me the most? What are my most important insights?
- What impact does the learning experience have on my personal purchasing and consumption behaviour? What do I intend to do? What arguments do I find for myself and others?