

Design for Government  
2017

# FOOD SYSTEMANTICS

The semantic system of regional sustainable circular food.



# PREFACE

Who, what and why?

This project report represents the final outcome of Design for Government (next referred as DfG) 2017 course at Aalto University as well as outlining the design process throughout the whole course. The report contains part of our research clarifying our main insights, the debriefing process and our proposal presented at the final gala of DfG 2017.

During 13 weeks period two groups worked on the brief of a model for regional sustainable circular food in the South-West Häme region, commissioned by the Ministry of Agriculture and Forestry (MMM) and the Ministry of Environment (YM). Our multidisciplinary team consisted of five master students - Nurgul Nsanbayeva and Anna Kokki from the Creative Sustainability MA Design Programme, Tito Williams II and Tilda Jyräsalo from the Collaborative and Industrial Design Master Programme, and Elisabeth Fried from the Master of European Studies in Design (MEDes) Programme. The report will guide you through our way of tackling such a broad topic while identifying the problem at its core. Through the process of empathic design research, observations, interviews, analysis and interpretations we were able to identify three main issues that need to be incorporated in future food models to avoid damaging impact on land use and biodiversity of crops.

## DECREASING ENTRY OF FARMERS

8% of farmers are  
under 35 years old.<sup>1</sup>

## INCREASING SIZE OF FARMS

Farms over 100 ha  
increased by 74 %.<sup>2</sup>

## DELAY IN EXIT OF FARMERS

Average age of farmers in  
2016 was 52 years old.<sup>3</sup>

As these add up to climate change, those can significantly endanger circularity of food production and regional food self-sufficiency in Finland. Our final proposal is explained through the term *systemantics* and aims to consider these three trends holistically proposing simple steps to achieve balanced circularity of food production in Finland.

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1) MTK (2014) [https://www.mtk.fi/ajankohtaista/tiedotteet/tiedotteet\\_2014/helmikuu/fi\\_FI/maaseutunuoret\\_EU\\_kokous/](https://www.mtk.fi/ajankohtaista/tiedotteet/tiedotteet_2014/helmikuu/fi_FI/maaseutunuoret_EU_kokous/)

2) Official Statistics of Finland (OSF): Statistics on the finances of agricultural and forestry enterprises e-publication

3) <https://www.luke.fi/en/news/number-farms-confirm>





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# THE BRIEF

# CIRCULARITY

# AND FOOD

This year was the first time when multiple Ministries came together to create briefs for DfG course. In our case, the project is a joint commission by the Ministry of Agriculture and Forestry (MMM) and the Ministry of Environment (YM).

Our process has shown that the way of working and solving complex problems for a secure future can only be successful through cooperation. Changing climate and the centralised agricultural system has a big impact on food production and quality. Increased use of pesticides, manure from livestock, ecological monoculture, and other similar unsustainable linear practices in agriculture lead to environmental damages, unstable global market, and unethical work environments.

Those conditions affect food sufficiency around the world. In Finland, food self-sufficiency and food security is an important challenge due to the country's weather conditions. Many products have to be imported as the environmental and economic costs of growing them locally are too high. In addition, primary production in Finland is heavily dependent on government and EU subsidies. Role and responsibilities of farmers are expanding: they no longer just farm or produce food, but need to market their produce, address sustainability issues, meet regulatory requirements, and fill countless papers for subsidies.

On the consumption side, food has become not only source of nutrients for people, but the form of self-identity, whether it is health, environmental, economic, religious, or political concern. Consumers in Finland and around the world are accustomed to accessing fresh vegetables and fruits all year long and quite distanced from food production process.

However, in comparison with other countries, In Finland, agriculture is less reliant on chemical fertilisers, the food system is quite transparent, food safety is a very high level and animal disease is extremely low. There is also an opportunity to meet food demand through traditional means of hunting natural products like wild berries, mushrooms, fish and deer. Nevertheless, the one question that will always be relevant is: how can profitability and sustainability match?

Throughout our research, we explored how can circularity be beneficial for food production. Food and other raw materials and resources should come from and be used as locally as possible to minimise the ecological footprint and possible loss or waste. In that sense material efficiency and food security should be a long term goal for future.

As the result, the main aim of the project was to enhance a development of a food system model that would support economic, social, ecological and cultural dimensions of sustainable development. We were interested in exploring collaborations within regions, policies and legislations concerning food production, roles of stakeholders and actors as well as material resources and flows. Finally, to dive deeper into the subject we were given a place to concentrate our field research on - the city of Forssa, located in the South-West Häme region of Finland.



Our process started with an extensive research conducted by two teams working on the given brief. The desktop research consisted of reviewing over 50 reports on the circular economy and food initiatives by the Ministries and other relevant actors such as government organisations and institutions in Finland.

Using empathic design methods, we conducted more than 25 interviews with different stakeholders of the food industry, including among others farmers in South-West Häme, manager of Forssa municipality agriculture office, an advocate of citizen-driven Ryyniremmi food circle. We analysed these findings, feelings, and words to turn the collected data into useful insights. Based on the results, we mapped out all relevant stakeholders in the system including their relationships to one another.

# RESEARCH



# RESEARCH FACTS & VISIONS

## SITRA CIRCULAR ECONOMY ROADMAP

*Leading the Cycle - Finnish road map to a circular economy 2016-2025* was published by Sitra in 2016. A circular food system is one of five recognised key areas. It is said that circular economy could offer 2 to 3 billion euros of value potential and in full adoption create more than 75,000 new jobs by 2030. Circular Food System connects to many sectors and industries in the circular economy, for example, side flows of primary production and food processing can be used as fertilisers and energy sources in biofuel business. Development in one industry area can support the development of other industries and help to adopt a sustainable society culture of experimentation.

A circular food system covers a lot of issues from primary production to resource-wise consumer choices. Consumers have a key role in reducing emissions and resource consumption and in the road map, this is to be promoted through public food services.

## LOCAL FOOD? - BUT OF COURSE!

The eponymous report published in 2013 by the Ministry of Agriculture and Forestry opens up development objectives for the local food sector in Finland and sets up a

target stage for the year 2020. The report recognises reasons to promote local food. In social and economical side reasons it includes positive impacts on the local economy and food culture through, for example, shorter supply chains. Developing local food systems should also benefit government with resource savings and synergy benefits.

The visionary report includes six areas of action. We would like to highlight two of these areas: Improving opportunities in primary production and a Closer cooperation between actors in the local food sector. According to this vision, by 2020 in Finland local food system could be:

***“Production of local food is a central element in securing self-sufficiency and emergency supplies.”***

***“Local food production and processing are part of profitable production on a growing number of farms and support the viability of the smallest farms as well.”***

***“National strategies and outlines show the way for the local food chain and secure the growth of the sector.”***

***“Development work is effective and it is done in genuine cooperation between different actors in the local food chain.”***

This shows an interest towards making different paths to farming possible and enhancing the diversity of farms in Finland. When local food and circularity is put together, it creates economical and social opportunities for regional development. But from farmer's perspective, what could make this development happen?





# FOOD PRODUCTION IN FINLAND

Major production sector in Finland is crop production with about 65 % of all produce compared to the second highest production of milk with about 15 %.<sup>4</sup>

Over the past ten years, the number of farms has decreased but the area of the agricultural enterprises have grown in size, decreasing the competitiveness of smaller farms. A number of organic farms have remained rather stable, however, the area of land used has also increased.<sup>5</sup>

In addition, without greenhouses growing many common vegetables such as tomatoes, cucumbers, and various lettuce and herbs would not be possible in Finland.<sup>6</sup>

Farming in Finland is highly dependent on subsidies. Subsidies and centralization of sales keep the food price down for customers but also push primary producers' income down, making it hard for farmers to make a living out of selling their produce. Farmers need subsidies in order to make a living and many farmers have side businesses or rely on spousal income from outside the farm.

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4) LUKE Natural Resource Institute Finland 2015

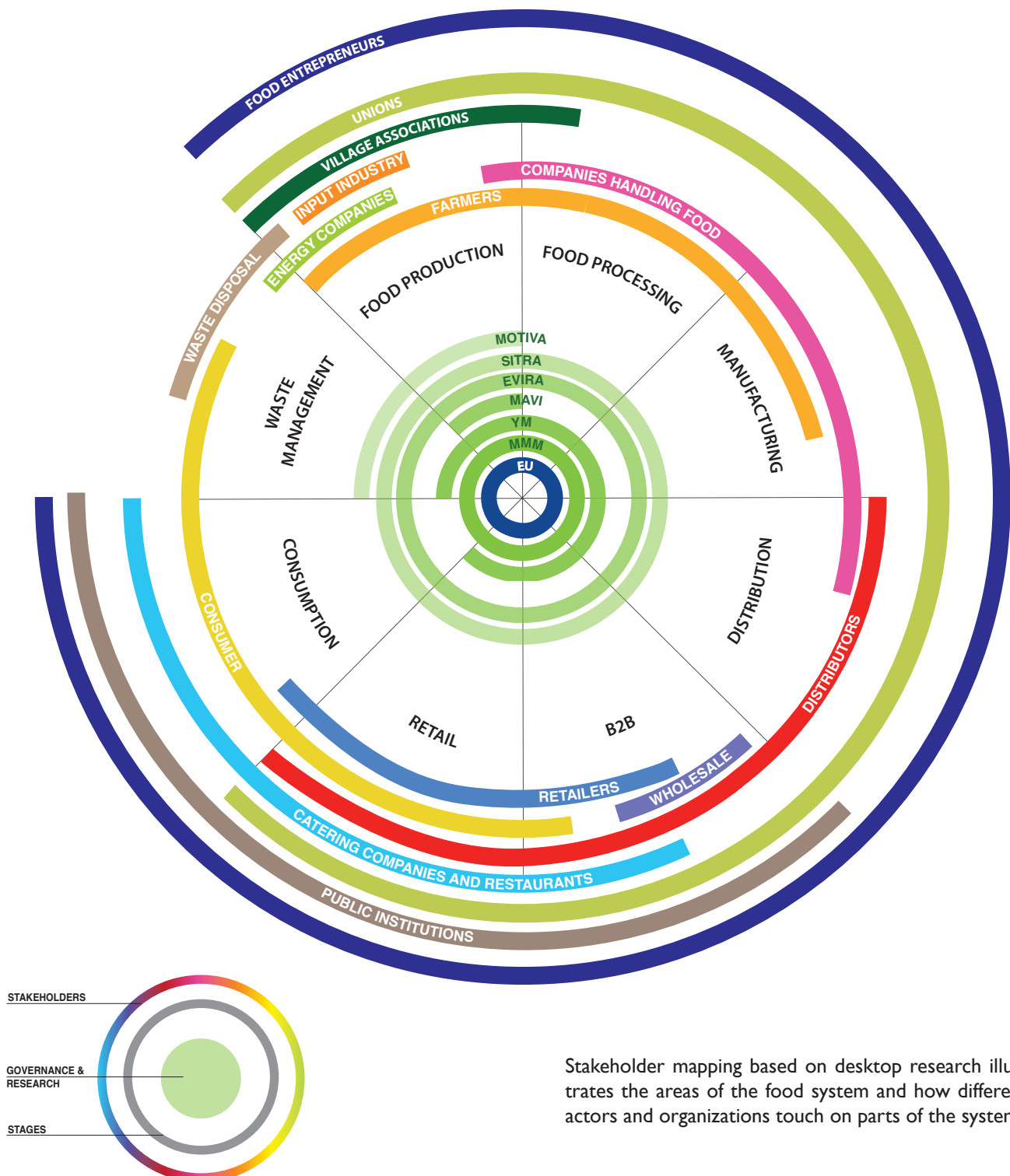
5) LUKE Natural Resource Institute Finland

6) LUKE Natural Resource Institute Finland - <https://www.luke.fi/en/natural-resources/horticulture/greenhouse-production/>



# STAKEHOLDERS

In our research, we decided to focus on the farmer because farmers are the starting point: without farms and farmers there is no food system to make circular. When we travelled to our research location in South-West Häme we also got familiar with the local circular economy development. As we broke down the brief and clarified our interpretation of it, to understand what we want to communicate about regional sustainable circular food, we started to concentrate on the meaning behind language and actions.



Stakeholder mapping based on desktop research illustrates the areas of the food system and how different actors and organizations touch on parts of the system.



# INSIGHTS INTERVIEWS

We conducted 25 interviews and talked to various people that either worked within the food system or had a close relation to it through their activities. Interviewees ranged from ministry employees to farmers and local food advocates. A variety of interviewees also showed the scale of the food system and the brief. While people connect and come together through shared interest in food, but through their work, they have really different perspectives on food.

*“[Farming is a] very interesting field, especially as I have jumped into it from outside the business. There is something new every day.”*

Farmer in Forssa

*“If there would be no subsidies, the market price would be such that we would get along. It would ease the life extremely.”*

Farmer in Forssa

*“It is possible to mock a farm, if you are lazy or don't care. The subsidies don't encourage to perform well. They are paid by the land, not performance.”*

Farmer in Forssa

*“If I would have education for all of this I would have needed to study for about 100 years.”*

Farmer in Forssa

*“Centralizing culture distorts food industry and sales structure (system). Brazilian meat scandal affecting our production is a good example. Money is too strong - we have forgot what handmaking means, it's significance, quality and expertise.”*

Farmer and retailer

*“If a carrot bag would cost 6 cent more, we would need no more subsidies.”*

Farmer in Forssa







# INSIGHTS DESIGN GAMES

## SKETCHNOTING

In order to visualise and make connections we used sketchnoting as one form of documentation in our initial interviews with main stakeholders - Birgitta Vainio-Mattila from Ministry of Agriculture and Forestry and Hanna Mattila from Finnish Innovation Fund Sitra. By visualising conversations on the go we wanted to show possible connections that otherwise might stay hidden. Sketchnoting is also a tool to stir up the imagination and open up the conversation.

## DESIGN GAMES

Design games are an emphatic design tool for facilitating dialogue and to inspire conversation. To understand stakeholders and relations between different actors involved

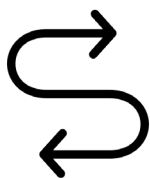
in circular food scheme we played a stakeholder game together with Birgitta Vainio-Mattila and Hanna Mattila. The game helped us to understand most relevant stakeholders and gave us insights to continue with stakeholder mapping. Actions and concrete objects also stimulate thinking in a different way that voicing thoughts out in a conversation or interview.

## THE ATLAS GAME

Two teams together also arranged an Atlas game session as a super group, where a game was played with five representatives from the ministries and the Finnish Innovation Fund Sitra. The purpose of the game was to collect more information about the brief, that would help us to narrow it down and choose a focus area.



## MAIN FINDINGS



Mindset change is needed through the system.



More collaboration is needed: food is a horizontal issue. It touches everyone and effects to everything.



Bad media image of farming influences attractiveness of farming occupation.



Farming is not seen as a business what comes to innovations funds: no funds are allocated for farming innovations.



# SENSEMAKING

# UNDERSTANDING

# THE CONTEXT

## POINT ANALYSIS

POINT-analysis was used to gather together and share individual research findings which were afterwards put into an affinity diagram. POINT stands for Problems, Opportunities, Insights, Needs and Themes. These categories are used to mark insights and findings from the research as those are shared with others. An affinity diagram is a tool that can be used to create synthesis and clearer understanding of the subject. Diagram can be used to turn data into knowledge and structure this knowledge. In our case affinity map was used to recognise possible research areas and to create statements and “What if?” questions that helped us to go forward with research.

## STEEP MODEL

We used the STEEP- model to analyse the data from desktop research, design games and interviews. System models can enhance communications between different actors through making the context of action visible for every participant. STEEP comes from words Social, Technological, Environmental, Economic and Political and the model helps to arrange and understand different actors and perspectives within the current system and also shows different flows and relationships between actors.

## THE FOOD SYSTEM IN SOUTHWEST HÄME

The *Food System in Southwest Häme* mapping (following page) shows our interpretation of the current food system. Together with personas created from our data collection the model works as a base for recognising possible leverage points of the system where successful intervention could be feasible to implement. This mapping is a representation of stakeholders and contributed in our process to the soft systems methodology oriented thinking. The aim is to identify reference points for direct action. In our research, the mapping helped to ensure a collective understanding and a vision of the system.

## PERSONAS

Through creating personas out of collected data it is easier to build understanding and visualise different viewpoints. When personas are based on data, throughout the process it prevents ideas from getting generalised. Carefully crafted personas, always non-judgemental, can support the process as reminders of real people and their perspectives. During the mid-term review, personas were used to communicate our findings. In addition, placing personas into the stakeholder systems map showed which parts of the system we interacted the most during interviews or workshops.

# FOOD SYSTEM

## in southwest Häme

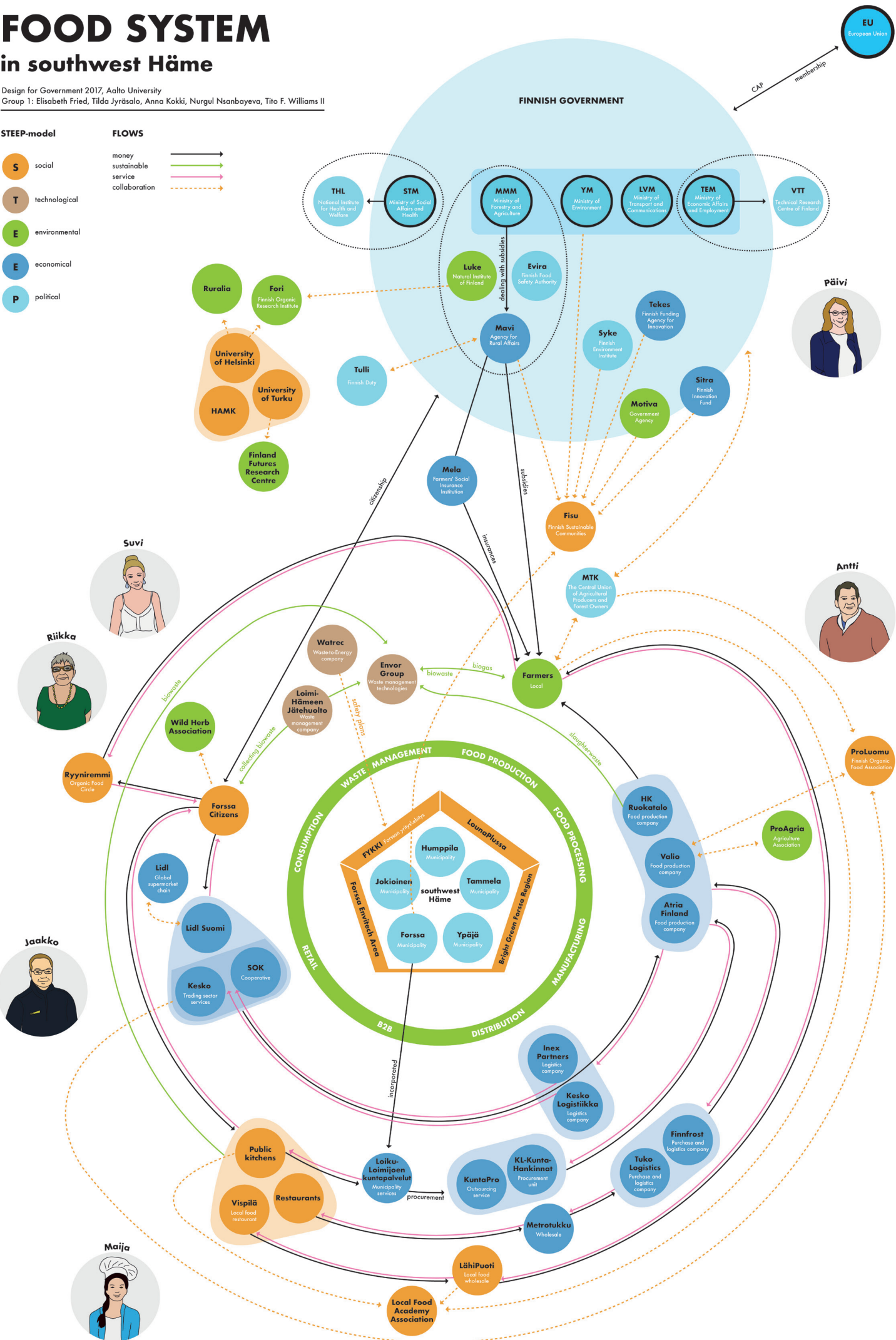
Design for Government 2017, Aalto University  
Group 1: Elisabeth Fried, Tilda Jyräsalo, Anna Kokki, Nurgul Nsanbayeva, Tito F. Williams II

### STEEP-model

- S social
- T technological
- E environmental
- E economical
- P political

### FLOWS

- money
- sustainable
- service
- collaboration



In the lecture, we also learned there is no neutral system and everything matters, on every level. For us, this meant how governmental initiatives are able to address challenges in the system and how they are received by the target audience. From the research, we could agree that many actions were taken to address different agricultural issues, including farmers well-being and environmental impact. As lots of resources were directed to develop food system in Finland, we saw an opportunity to look into existing structures from different angles, changing the perspective to actually achieve the set goals.



# FINDINGS

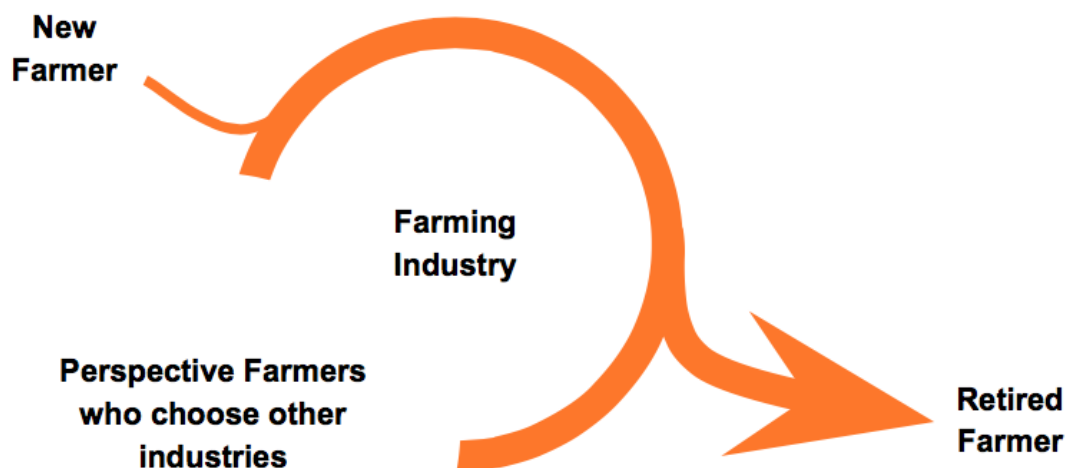
## WHERE ARE THE LEVERAGE POINTS

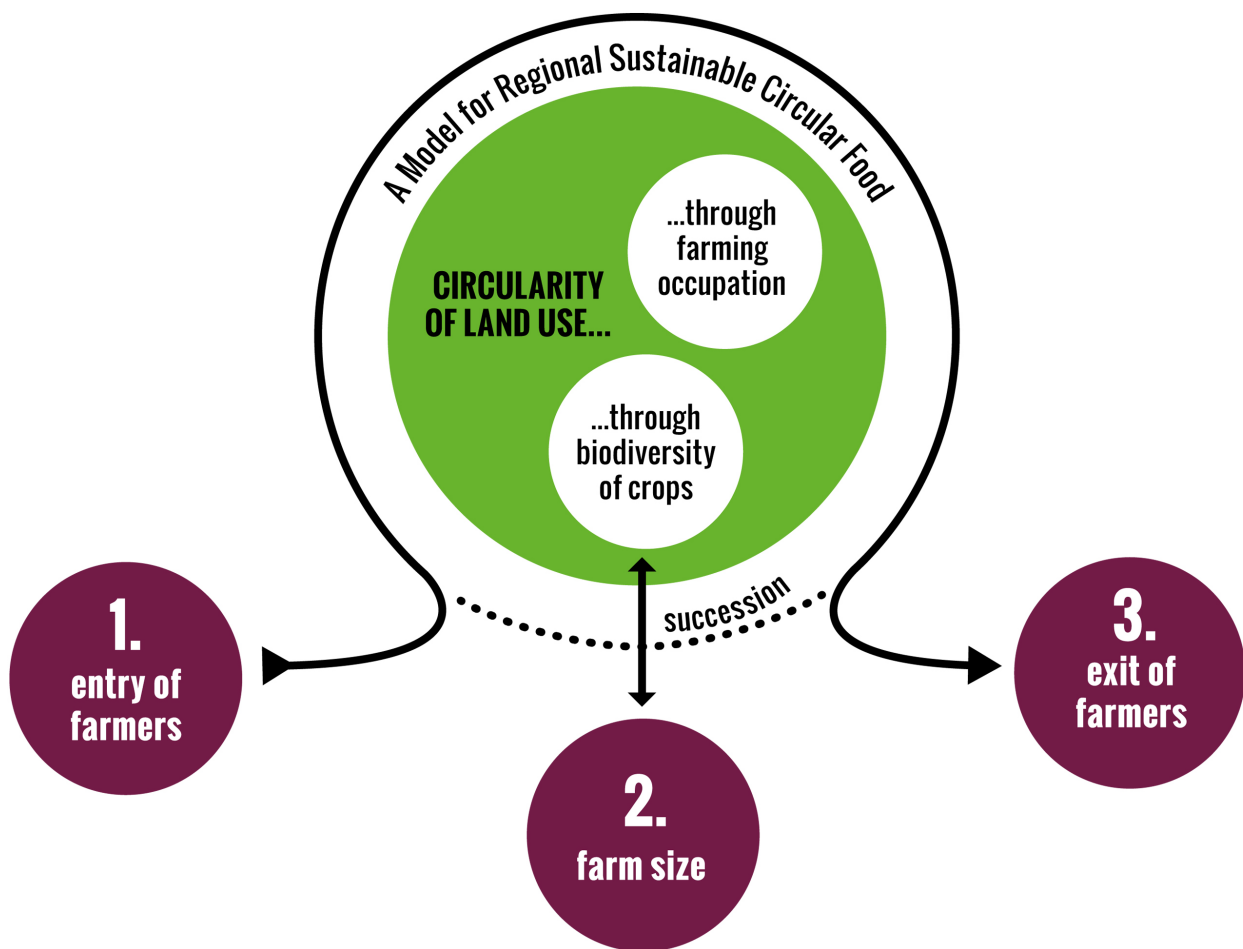
WHAT IS THE SYSTEM COMMUNICATING? WHAT LANGUAGE DOES IT SPEAK?

After interviewing farmers of the South-West Häme region, we discovered that the farming occupation is no longer desirable due to long and unregulated working hours, centralization of the food system, high opportunity costs for small farms, and popularity of other non-manual career choices. Through our research, we also discovered that there are many governmental programs that aim to boost interest in the farming career and assist to existing farmers. However, those programs have not realised their potentials. Why is that?

WHAT ARE FACTORS AFFECTING CIRCULARITY OF FOOD SYSTEM?

Based on our research we recognised three leverage points in the current system. We define circularity in this context as circularity of land use. We look at the Regional Sustainable Circular Food system as something that would keep the farming occupation continuous, in a way that there will always be successful and functional farms producing food in Finland while taking care of the land - the most valuable base for food production. Without working farmers, there is no circularity of land. This lead us to look deeper into the occupation of farming. The three trends we see as crucial points for maintaining the farming occupation and circularity of land use are the entry of farmers, the farm size and the exit of farmers.





1) Entry of farmers is decreasing with 8% of farmers being under age of 35. This creates a problem when less workforce is entering the business than leaving the business. This can cause a decrease in the circularity of land, more centralization and possible loss of know-how. For example, in 2015 there were 2100 farmers retiring and 390 farmers entering the business within the farmer's early retirement scheme.<sup>7</sup>

2) Farm size is increasing with the number of farms over 100 hectares increased by 74% between 2004 - 2012.<sup>8</sup> Subsidies are directed towards the amount of land that supports the development of big farms. The amount of land doesn't mean that land is used to produce food. Big farm size is connected to mono-crops what can damage soil health and is more vulnerable to devastating loss.

3) The exit of farmers is increasing with an average age of farmers being 52 years old in 2016.<sup>9</sup> Low profitability causes farmers to leave the business later. Low profitability also means that pensions are highly government supported as possibilities to save pension from income is lower.

Together these three points create a threat to the food system in Finland. It can be said that in the worst case we will have huge farms and no farmers. Massive farms can create harmful effects like soil erosion or lower diversity of crops. Lack of biodiversity can cause a threat to food safety and self-sufficiency.

7) Forkful of Facts 2016 – Food Industry Statistics. Ruokatieto (Finnish Food Information) publication 2016.

8) Statistics Finland [http://www.stat.fi/til/mmtal/2012/mmtal\\_2012\\_2014-04-03\\_tie\\_001\\_en.html](http://www.stat.fi/til/mmtal/2012/mmtal_2012_2014-04-03_tie_001_en.html)

9) LUKE Natural Resource Institute Finland <https://www.luke.fi/en/news/number-farms-confirmed-50000/>



Our brief asked to explore Forssa area where we discovered the damaging effects of the three trends - delay in the exit of farmers, decreasing entry of farmers, and increasing size of farms.

Forssa is a city in the south of Finland, located in South West Häme region between Helsinki, Turku, and Tampere. With a small population of 17,000 people, its economy is heavily depended on the food industry and bioenergy. To support those industries, the city is part of BrightGreen sustainability initiative and South West Häme host agricultural school of HAMK University. Nevertheless, the three trends have affected Häme as well. The region has lost around 3000 farms over the last 20 years which is roughly 150 farms lost per year.<sup>10</sup>

*„Young people are not anymore interested in farming, the farm units have to be very big. Young people don't have the spirit for farming anymore, the same money is easier got somewhere else than tearing from the soil. Those who continue with big farms, their loan burden is huge. Regulations get tighter all the time, with fertilizers and everything. They constantly take off the pesticides, you have to be mixing new cocktails all the time.“*

- Carrot farmer in Southwest Häme.

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<sup>10</sup>) LUKE Natural Resource Institute Finland Statistics Database - structure of agricultural and horticultural enterprises, number of farms by region 1995-2012. <http://statdb.luke.fi/PXWeb/pxweb/en/LUKE/?rxid=001bc7da-70f4-47c4-a6c2-c9100d8b50db>



# PROPOSAL

## DEFINING DIRECTION

From collected insights comes a wealth of knowledge with endless possibilities for development within the system. The question became, where are the most influential and potentially disastrous ruptures in the Finnish food system?

Upon analysis of the system, we would recognise in an obvious integral actor within it, farmers and more specifically farmers for primary food production. These farmers produce and cultivate food in Finland before it passes through distributors, processors, packagers, or grocery stores. Therefore, these farmers are the first responders of the Finnish food system.

From research, analysis and synthesis we would identify three detrimental trends that threaten the life of primary food production in Finland; 1) A decrease in the entry of farmers, 2) An increase in the land size of farms, and 3) A delay in the exit of farmers. We discovered these trends endanger primary food production by breaking circularity of farming occupation and wellness of

land necessary for primary food production to flourish.

How could we begin to repair circularity of primary food producers as an occupation? Our team would first identify what policies and regulations are in place that contributes to our attempt to combat adverse trends in the sub-systems of primary food production. We would observe a silent yet persuasive communication that was neither spoken, written nor visual, reverberate from this system. What we observed were semantic messages communicated by the system of primary food production. Policies and initiatives on paper can communicate and suggest positive action while the semantics of that system or, as we defined it, *systemantics* guide individuals to act in contradiction to the desired outcome.

Next, we would explore how *systemantics* can aid in creating a model for sustainable circular primary food production in the Finnish context.

# PROPOSAL

## SEMANTICS VS. SYSTEMANTICS

Semantics is the “meaning of the interpretation of a word, phrase, text, or sign”.<sup>11</sup> This refers to cues within communication that may send a deviated or parallel message to the literal context of a form of communication. We recognise semantics most in verbal language, understanding it is not what someone says but how they say it that affects your interpretation of what they actually mean. Our interpretations of semantic messages extend beyond verbal and written language. Semantics are expressed in gestures and body language, images and even products. Product semantics allow users to intuitively use a product. Product semantics says “Hold here”, “Push here”, Pull here.

However, semantics do not only exist in verbal, written, gestural, or visual forms. Semantics extends further into the world of systems. We will define the existence of semantics in systems as *systemantics*.

*Systemantics* is the interpretation of the meaning of a system. Systemantics on a daily basis, and can be a powerful tool for good. An education system that allows citizens to study free of charge with a simple applica-

tion process can say; “all people must have equal access to high-quality education and training. The same opportunities to education should be available to all citizens irrespective of their ethnic origin, age, wealth or where they live.”<sup>12</sup> However, systemantics is sometimes used for corruption.

For example, a justice system which targets incarcerations toward specific groups of citizens with pathways to education and employment blocked leads easy pathways into crime, says to those citizens their justice system wants to trap them within the criminal justice system. “Today, a criminal record serves as both a direct cause and consequence of poverty.”<sup>13</sup>

Our project would look to explore systemantics within primary food production of the Finnish food system. As Finland wishes to become a world leader in sustainability and circular economy we would look to understand; what are the effects of the current system on primary food production toward sustainable circular food, wherein the systems circularity is broken, and what role do systemantics have in creating these breaks.

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11) <http://www.dictionary.com/browse/semantics>

12) [http://www.oph.fi/download/146428\\_Finnish\\_Education\\_in\\_a\\_Nutshell.pdf](http://www.oph.fi/download/146428_Finnish_Education_in_a_Nutshell.pdf) Pages 6-9

13) [http://www.huffingtonpost.com/bill-quigley/40-reasons-why-our-jails-are-full-of-black-and-poor-people\\_b\\_7492902.html](http://www.huffingtonpost.com/bill-quigley/40-reasons-why-our-jails-are-full-of-black-and-poor-people_b_7492902.html)

# PROPOSAL

# SYSTEM DIAGRAM

In order to understand leverage points around the three trends we used systems mapping as a method to create a diagram to reveal the connections and causations within the regional sustainable circular food system. As we have earlier mentioned, we believe that regional sustainable circular food system is fundamentally about the circularity of land use. The circularity of land use is created through farming occupation, as an activity of a person, engaged in agricultural practice as the way of living and biodiversity of crops, as the variance in characteristics of plants to enhance soil health and food security.

We see the circularity of land use as a continuous loop that shouldn't break. First, there is the point when new farmers enter the business and start taking care of the land as part of their job. Farmers are taking care of the land until they exit the business, for instance when retiring. This leads us to the second critical point in the loop, the exit of farmers. If there is a new farmer entering and continuing taking care of the land after old farmer's exit, succession happens and the loop stays whole. However, if a farm and land are abandoned when the farmer decides to exit farming, the loop - and circularity of land use - breaks heavily. The third factor that we recognise influencing the circularity of land use is the farm size, as bigger farms often tend to hinder the biodiversity of crops.

As we speak about Systemantics, we choose current three actions that ministries

have implemented to target three leverage points - entry of farmers, farm size and exit of farmers - and took a deeper look at the semantics of those actions and how they affect leverage points and what they communicate systematically.

First, there is a young farmers start-up support that aims at encouraging younger generations to start farming. However, it is a complex process requiring agricultural education, strong confidence in career choice, and bank credibility. In fact, more than 50% of applicants felt they would not have been able to handle the process alone.<sup>14</sup> Consequently, the systemantics of this support communicates, if you want to be a farmer, you should have a strong passion for a lifestyle, because your profit will not compensate for your extreme physical and mental labour.

Secondly, currently, subsidies are given based on the size of farming land. In addition to other detrimental factors, it is causing farmers to increase the size of their farms. Furthermore, the government support aims to drive food prices low to make it affordable, subsequently decreasing direct sales profit of a farmer. As a result, farming is not seen as a profitable business and does not receive support from innovation funds like TEKES. The systemantics of subsidies says, that in order to make a profit you need to have bigger centralised and intensified farming, which also implements that the system discriminates against small specialised farms.

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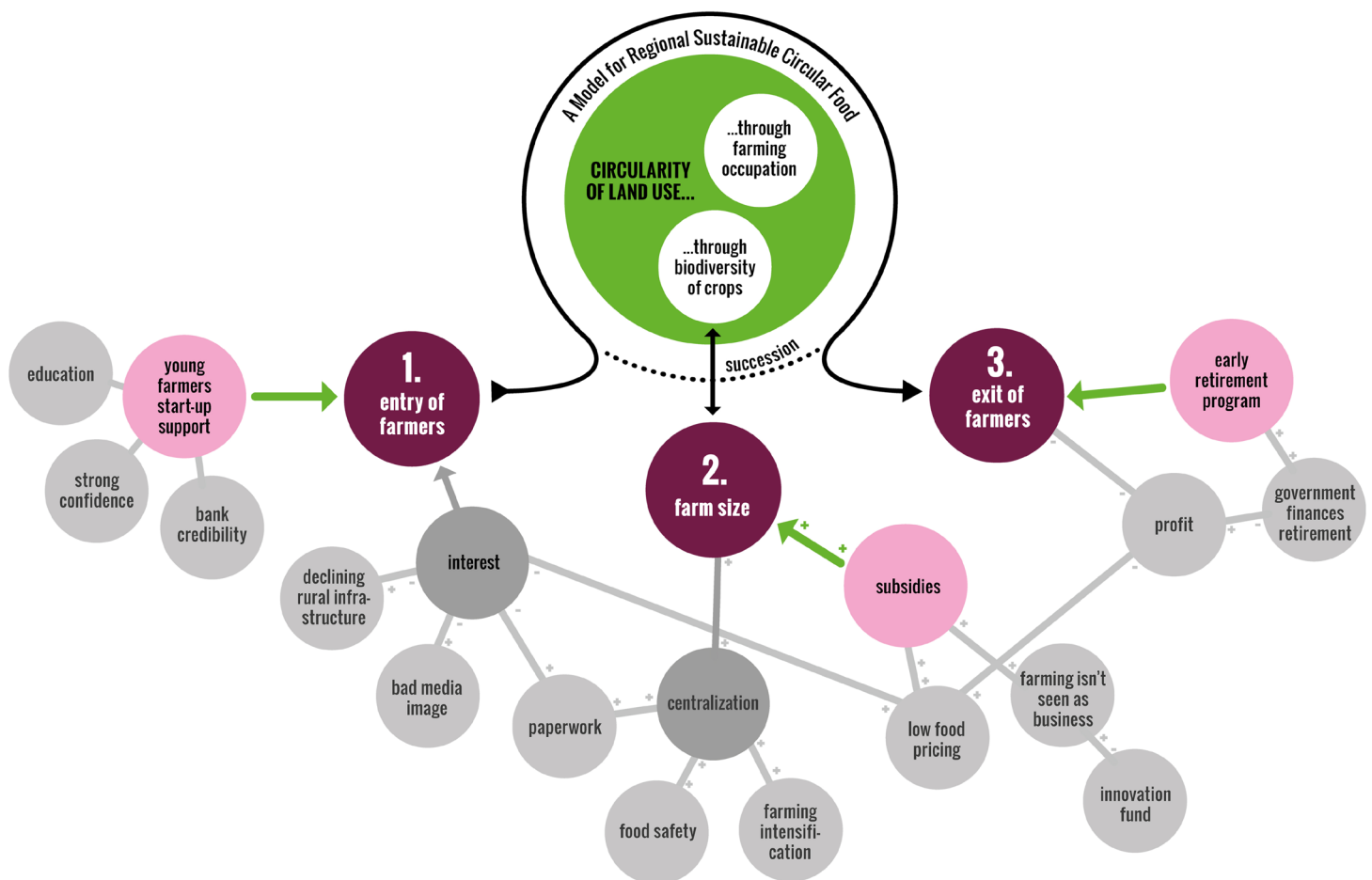
<sup>14</sup>) Kuusela 2010, Aloitustuen vaikuttavuus nuoren viljelijän maatilayritykseen. Accessed through: [https://www.theseus.fi/bitstream/handle/10024/29696/Kuusela\\_Sanna-Mari.pdf.pdf?sequence=1](https://www.theseus.fi/bitstream/handle/10024/29696/Kuusela_Sanna-Mari.pdf.pdf?sequence=1)



Thirdly, there is an early retirement program, which has the best intention to improve competitiveness in the agricultural sector by transferring resources from exiting farmers to the farmers who will continue the business. However, the retirement decision is depended on a profit. Farmers are less likely to retire when the profit made from agricultural produce is low. Due to low food prices income generated from farming pension insurance is insufficient, and the government finances a large share of farmers pensions. While the early retirement program has aimed to accelerate succession process from retiring farmer to a young newcomer, its potential to reduce retirement age was not realised. Its systemantics to make farmers retire faster with the

low pension financed by the government, which does not sound as a win-win option for anyone.

The systemantics behind those three actions are not farmer-centric - newcomers to the occupation and existing farmers have to face a complex process. While the intentions are right, the actions used for reaching the goals are not working. However, what if the actions could be re-framed? What if those existing programs could convey a different systemantics? Our proposal consists of three scenarios – *Pathway to farming*, *Innovation for LandWellness and Venture Farmer* – that would help to meet the goals. We will explain those scenarios through short stories of two farmers.



# PROPOSAL STORIES

During our visit to Forssa, we met several active farmers and people interested in farming either as an occupation or hobby. Based on those real people, we created two personas and three scenarios to describe possible systemantics of possible actions by the ministries and their outcomes.

## PERSONAS

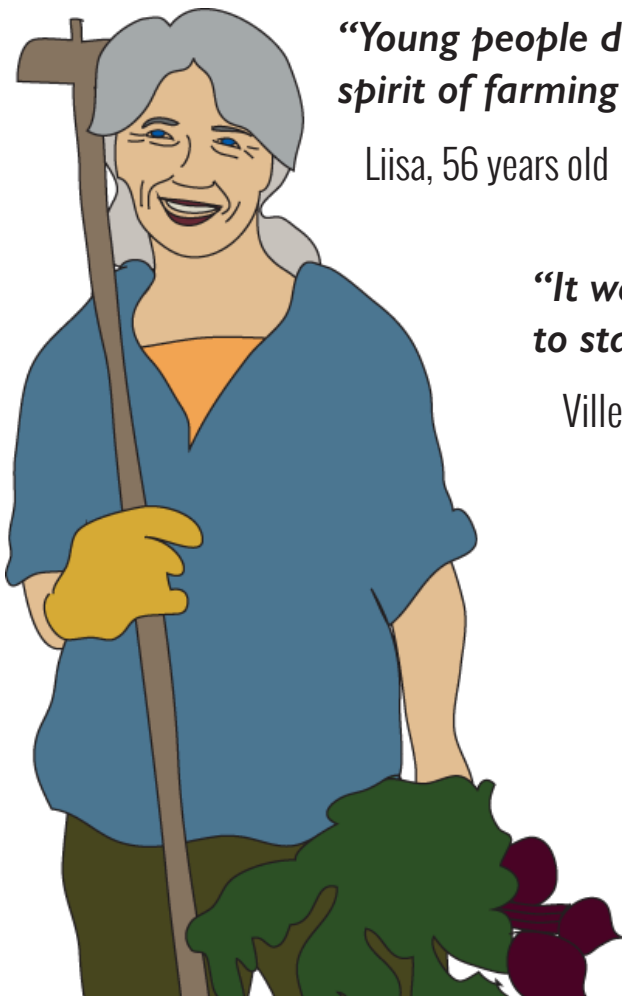
Liisa, 56 years old and grows root vegetables. She is divorced, taking care of the big farm on her own. She would like to retire within the next few years, but her children

are not interested in continuing the business. Lisa says “Young people don’t have the spirit for farming anymore, the same money is easier got somewhere else than tearing from the soil”.

Ville, on the other hand, is 34 years old, HAMK agricultural school graduate. He rents a small organic farm, but he must have a part-time job to make a full income. Sharing his experience, Ville says “When I started five years ago, I knew little about farm life. It was a real gamble to start here”.

## PATHWAY TO FARMING

What if there was a 2-year mentoring programme “Pathway to farming” for people like Ville. During this period, he can work on the farm of retiring farmers like Liisa to gain agricultural experience. After mentoring ends, Ville can decide whether he wants to continue with the farming and apply for startup fund for young farmers.



***“Young people don’t have the spirit of farming anymore.”***

Liisa, 56 years old

***“It was a real gamble to start farming.”***

Ville, 34 years old



Experienced farmers like Liisa can benefit from the additional workforce. If taken further, in collaboration with the Ministry of Economic Affairs and Employment (TEM), this mentoring programme can address employment of vulnerable populations such as long-time unemployed people, immigrants, and refugees. While hiring a long-time unemployed person, a farmer can compensate paid salaries partially through subsidies paid by the TEM. Therefore, there are endless possibilities for cross-ministerial collaboration in order to enhance the existing policies and programmes.

## INNOVATION FOR LANDWELLNESS

What if portion of funds from current subsidies and rural development programme are directed to create “Innovation for LandWellness” grant. In order to encourage equal opportunities for everyone, this funding could offer a separate set of requirements for small and large farms. For example, our hero Ville owns a small organic farm that he just started. He can receive funding for alternative farming practices like permaculture. An experienced farmer Liisa, who

owns a large farm, can receive a funding for trying out new crops and switching to organic fertilisers.

Those will ensure land quality over its size and biodiversity of crops while encouraging diversity of farm types.

## VENTURE FARMER

In addition, what if older farmers like Liisa can benefit from “Venture Farmer” programme. It can consist of entrepreneurial advisory services to improve farmer’s profit through marketing and use of alternative retail channels. For example, Liisa can use the surplus of vegetable produce to make side products like jams. With the help of advisory service, she can create her own brand and sell her products online to increase her profit and, subsequently, raise her contribution towards pension.

Those are 3 examples of infinite choices that ministries could do to reframe existing programs and funding to promote systemantics centred around wellness of farmers and land.



Pathway to  
farming

... a guidance to  
the promising  
career, supporting  
rural lifestyle and  
circularity of skills

Innovation for  
LandWellness

... a funding to  
enhance land  
circularity and  
biodiversity  
through variety  
of farm types

Venture  
Farmer

... an advisory  
to boost  
entrepreneurship  
and quality of life  
in present and  
future



# CONCLUSION

## FINAL WORDS

Our goal with *Food Systemantics* was to look into existing resources and services and re-frame their systemic semantics to support people entering and exiting farming occupation, while increasing well-being of their farming land, crops and livestock. During our research, we discovered that many programs exist, advisory services are offered and plenty of key projects are set and carried out. Nevertheless, there are still big challenges in the food system and the desirable goals are not met, leading to a disconnection between good intentions and communication. With our project we want to emphasize the holistic and human-centric approach to the Finnish Food System, concentrating on language and meaning of systemic actions.

The main question of the brief was how to match sustainability and profitability. The brief included many possibilities as it touched the whole Finnish Food System from primary production to customer behaviour. In the beginning, desktop research was an important step to understanding the system and its actors. Interviews and field trips were crucial - leaving so-called Helsinki bubble and being in rural environment offered the different view on food and how food is perceived.

Field trips to Forssa were eye-opening in many ways. The insights from first interviews opened up the regional scale of the food system; different levels became more visible, as primary production is influenced by EU and national and regional governments. We started to understand the huge number of different food-related projects happening just in Finland. Everyone we met in Forssa was very friendly and helpful, and

in general, atmosphere was positive. Meeting the farmers during the second site visit was a key moment of building the vision for Food Systemantics. In addition, we interviewed people via email and phone and continued desktop research as we heard more views from our interviewees.

In general, throughout our research, we discovered that there are many enthusiastic food professionals working in the industry. Nevertheless, the gap between customers and primary producers is getting bigger when it comes to understanding the farming occupation. There is an urgent need for a mindset change. To address it we introduced the term systemantics or system semantics. We believe that reframing the systemantics of Finnish Food System opens an opportunity to build on larger mindset transformation, that starts from changing the perception of farming as an occupation and an activity.

*Food Systemantics* includes and acknowledges the different actors with diverse roles and versatile target markets. We showcased infinite choices that ministries could do to reframe existing programs and funding to promote systemantics centred around wellness of farmers and land through building personas and creating scenarios.

We see the possibilities for *Food Systemantics* in guiding systemic mindset transformation and creating an environment that will draw more people into farming, which can enhance the circularity of the occupation and, subsequently, affect biodiversity and land wellness.

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## IMAGES

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# CONTACT

**Anna Kokki**

Creative Sustainability, Aalto School of Arts,  
Design & Architecture  
anna.kokki@aalto.fi

**Elisabeth Fried**

Master of European Studies in Design  
(MEDes), KISD, Cologne, Germany  
elisabeth@smef.de

**Nurgul Nsanbayeva**

Creative Sustainability, Aalto School of Arts,  
Design & Architecture  
nurgul.nsanbayeva@aalto.fi

**Tilda Jyräsalo**

Collaborative and Industrial Design, Aalto  
School of Arts, Design & Architecture  
tilda.jyrasalo@aalto.fi

**Tito F. Williams II**

Collaborative and Industrial Design, Aalto  
School of Arts, Design & Architecture  
tito.williamsii@aalto.fi

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