



Community Pick-Up Point Schemes for transitions in food: how a novel Alternative Food Network model offers socially innovative solutions to the challenges of growth

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ABSTRACT/SUMMARY

This study investigates whether the Community Pick-up Point Scheme (CPPS) business model allows for the growth of a sustainable alternative to industrial, globalised value chains without sacrificing the goals the initiative originally set out to achieve. Alternative Food Networks (AFNs) offer concrete solutions to persistent problems of industrialized food systems. Yet when AFNs grow, increased size or scale can cause them to lose the ability to maintain the type of impact or ideals they originally set out to achieve. Community Pick-up Point Schemes (CPPSs) represent a novel type of AFN, combining internet ordering platforms and community-based pick-up points to bring local products from small-scale producers directly to mostly urban consumers. The CPPS model is a social innovation that combines top-down structure and support with bottom-up entrepreneurship and engagement from the community to grow rapidly while maintaining transparency and direct ties between consumers and producers. The study begins with an investigation of existing work in transition theory on growth and scaling, then explores evidence from the literature about the impact of AFNs on societal transformations. To address gaps in understanding about growth of social innovations and transitions in food, a case study was carried out examining two CPPS initiatives – Rechtstree in Rotterdam, the Netherlands, and the Food Assembly in Berlin, Germany. Data was gathered through interviews, participant observation, and document analysis. A conceptual heuristic linking social innovation and societal transformation provided the framework to analyse initiatives' ability to grow while maintaining their goals. Analysis found that the business model does indeed make positive steps in this direction. However, since they are small consumer-oriented, for-profit businesses, CPPS initiatives are still subject to limitations in this regard. Though not a panacea for the myriad problems of modern food systems, CPPSs represent another part of the solution. The study concludes by devising recommendations for practice, policy, and research.

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1 INTRODUCTION

Food is one of the most fundamental necessities for human life. Yet it is also responsible for a major share of society's negative impacts on the planet. Every human must consume food daily to survive, but the potential for innovation and reforms to improve the sustainability of food systems often encounter significant barriers. The progress towards a sustainable future has been too slow thus far, and rapid transition to new approaches is necessary to guarantee that future generations will have the ability to nourish themselves and enjoy the healthy planet required for a decent quality of life.

Transition theory looks precisely at how such innovations for sustainability bring about large-scale changes in society. An interdisciplinary approach that leans on innovation studies and systems theory, transition theory aims to understand how these societal shifts towards sustainability, called transitions, happen and what factors influence them. One key aspect of transitions that is still not well understood is growth: how do innovations – and in particular social innovations – grow beyond niches to impact society?

This question is particularly relevant for food systems. Technical innovations play an important role in shaping the future of food; overlooked but equally important are social innovations. Alternative food networks (AFNs) are “forms of food provisioning with characteristics deemed to be different from, perhaps counteractive to, mainstream modes which dominate in developed countries” and are sources of many solutions to the problems caused by the unsustainable food system regime (Tregear 2011, 419). AFNs are social innovations, as they nearly always involve innovations in socioeconomic practices and structures around food. However, this distinction from the mainstream inherent in the AFN concept poses a serious problem for the growth of AFNs: if the mainstream is not sustainable but AFNs are by definition not mainstream, how can AFNs grow to bring about large-scale shifts towards sustainable food systems while avoiding the persistent problems of the dominant food system? Is it possible for AFNs to grow without losing the essence of what makes them more sustainable or more socially desirable than the current food system regime?

This study seeks to contribute to the effort to answer this pressing question by investigating an example of a type of AFN that has grown around a particular business model: the Community Pick-up Point Scheme (CPPS). The CPPS is an example of social innovation for sustainable food. It allows consumers to freely choose products directly from producers through an online platform, with a pick-up directly from a community pick-up point at a specific time. For producers and consumers, the business model

ensures fair prices for high quality products and a high degree of transparency. Two initiatives – the Food Assembly in Berlin and Rechtstreeex in Rotterdam – have pioneered the CPPS model. The initiatives provide top-down digital, physical, and information infrastructure to allow for bottom-up, community-led growth.

The question this study targets is: *how does the socially innovative business model used by these two initiatives support maintaining the initiatives' goals while growing?* The following sections investigate the impacts and challenges of growth in sustainability transitions, and solutions to these challenges from both the literature and the empirical case study. In the next subchapters, the theory and methodology underpinning the research are introduced. Chapter 2 explores existing knowledge on growth in transition theory and the importance of food system transitions. Chapter 3 details the findings of empirical research with the two initiatives. Chapter 4 discusses the implications of the findings for the research question, including the potential of this business model for driving societal transformation. Chapter 5 investigates the implications of the finding for food systems and transition theory research, practice, and policy and draws conclusions.

Research for this master's thesis was carried out within the project TRANSIT: Transformative Social Innovation Theory. The theoretical and methodological frameworks are based on those developed within the project. The Case Study Report, which will be published in 2015, utilizes the results of this thesis.

1.1 METHODOLOGY

The methodology for conducting the case study is based on the Methodological Guidelines for the TRANSIT project.¹ Parts of the following description are adapted from these Guidelines.

1.1.1 Selection of case studies

According to Klintman and Boström (2012), “the food sector is probably the one in which green political and social aspects are discussed the most through the lens of consumerism” (Klintman and Boström 2012, 107). I therefore chose to investigate two market-based initiatives that adopt the CPPS business model, which rely on political consumerism. Very many initiatives that can be seen as part of transitions in food systems are market-based and focus on building consumer-driven AFNs. This opens up possibilities for investigating many interesting questions that arise when social and environmental values are introduced while leaving the fundamental capitalist, market-based approach to food provision intact.

¹ See Søggaard Jørgensen et al. 2013

The case study approach was chosen in order to best obtain a thorough understanding of CPPS as a novel, socially innovative food provisioning model. According to Punch (2005),

“Only the in-depth case study can provide understanding of the important aspects of a new or persistently problematic research area... Discovering the important features, developing an understanding of them, and conceptualizing them for further study, are often best achieved through the case study strategy.” (Punch 2005, 148)

The in-depth case study is the most effective way to understand the complex interactions between different processes that determine the dynamics between each initiatives' growth and their goals.

The case study design chosen is an embedded single case design. This design was chosen because the single case study allows for a targeted investigation of a single phenomenon, while the embedded units give the case study depth of analysis (Yin 2009).

Each initiative is an example of a CPPS company. Both companies are active nationally in their respective country, but the study focuses on activities bounded geographically within the city in which each initiative is headquartered. This geographic boundary was chosen for several reasons:

- The city is the geographical level most relevant for organisation and development, therefore this is the level that is the most useful to analyse. Both initiatives are fundamentally about delivering local food to consumers. Local is generally conceptualised by the initiatives as a city or town and its surrounding region.
- each initiative has existed the longest and is most established in its headquarter city
- most operational aspects of the business model occur on the city level – such as producer and product sourcing, infrastructure development, neighbourhood coordinator networking, advertising, events and meetings, regulatory frameworks, etc. – rather than at the national level
- growth is defined in terms of increasing the number of pick-up points, so analysis on the individual pick-up point level would not be appropriate

Though the initiatives both share the CPPS business model and are located in a large city, each operates in a different context and followed a different developmental path. Flyvbjerg (2006) points out that “the closeness of the case study to real-life situations and its multiple wealth of details are important... for the development of a nuanced view of reality, including the view that human behavior cannot be meaningfully understood as simply the rule-governed acts found at the lowest levels of the learning process and in much theory” (Flyvbjerg 2006, 224). Choosing two instances of a CPPS initiative which share the business model and geographic bounding within the founding city but which differ in their other contextual aspects gives a richer picture of CPPS that is able to account for

contextual and internal influences and is closer to reality. This allows for a better understanding the processes relevant to the research question. The case studied is the CPPS business model, and the individual embedded units of analysis are the individual initiatives.

1.1.2 Empirical data collection

Empirical data was collected through three channels: **interviews, participant observation, and document review**. These three methods complement each other and together build a rich and nuanced set of empirical data.

The data was gathered as part of an internship with the Dutch Research Institute for Transitions over a 3 month period. One month was spent identifying and contacting practice partners, arranging cooperation agreements, and preparing the research. One month was then spent with each initiative on location intensively gathering data. This institutional setting and embeddedness within the TRANSIT project may have encouraged the initiatives to cooperate in the research. This is due to the ability to offer the initiatives attractive benefits in terms of exposure and networking through the project and institute, as well as the expertise and authority implied by the association with an established research institute.

The amount of data that was able to be gathered was larger in the case of Food Assembly in Berlin than for Rechtstreex in Rotterdam. Several factors influenced my more limited ability to collect data in Rotterdam. In Rotterdam there was a language barrier that made it more difficult in some cases to communicate with participants or understand material. There is also the possibility that the language barrier prevented participants from inviting me to events or providing me with material because they may have thought I would not understand what was said or written. This may have limited my ability to develop relationships with participants that could have otherwise opened other doors to events and information. In Berlin, this was not the case, since as a fluent German and English speaker there was no language barrier between me and participants. Furthermore, though I did know one contact within Rechtstreex through my previous volunteer activities, this contact left the company during my data collection period. Losing this contact within the organisation may have presented a barrier to data collection. In Berlin, several participants and I knew or had heard of each other through volunteer activities. This may have made it easier to obtain access to events, people, and information, as there may have been a higher initial level of trust than with participants in Rotterdam. This imbalance in the data between the cases is reflected in the empirical chapters. In the Berlin case, as I

had a richer set of data, I was able to incorporate more details into the analysis than in the Rotterdam case.

1.1.2.1 Interviews

Interviews follow the format of **semi-structured qualitative interviews** described in the TRANSIT Methodological Guidelines (Søgaard Jørgensen et al. 2013). Interviews were between 30 and 70 minutes long, were recorded on an audio device and transcribed into detailed summaries including direct quotations. Interviews were then coded based on relevance to the four dimensions of empowerment.

The purpose of semi-structured qualitative interviews is “to get an insight in an understanding of parts of another person’s life-world” (Søgaard Jørgensen et al. 2013, 18). Questions were carried out following an interview guide containing goals for the interview (what knowledge should be gained) and a set of questions. Questions were developed based on background research about the individual, the initiative, and its context. Concepts and language of the interview questions were designed to be as familiar and comprehensible as possible to the interviewee, targeting the interview goals.

Addressing Tregear's (2011) criticism of a lack of rigorousness in AFN research, a spectrum of interviewees were chosen to represent not only participants and supporters of the initiative, but also individuals with some distance to the initiative who may give insight into the shortcomings of the initiative, for example: former participants who left the initiative, participants who are also involved in similar initiatives, and external partner organisations. This helps to incorporate critical and dissenting viewpoints on the initiatives and their impact, to prevent bias or one-sidedness in the data.

Interviewees are cited with the interview number, e.g. “interview 1”. Some interviews were conducted in German, and any German quotes used in this study have been translated into English. Translated quotes are indicated with an asterisk (*) following the quote. An overview of all interviews can be found in Annex 2 – List of interviews.

1.1.2.2 Participant observation

This was carried out at public and private meetings and events in which initiative actors participated. According to the TRANSIT Methodological Guidelines, “participant observation can have a number of different forms; amongst those are short visits, participation in meetings and workshops, and longer stays – being a part of the group of people you are studying for a period” (Søgaard Jørgensen et al. 2013, 19). Participant

observation was used to create “thick descriptions”, described in the Guidelines as follows:²

“Thick description refers to the researcher’s task of both describing and interpreting observed social action (or behavior) within its particular context. The context can be within a smaller unit (such as a couple, a family, a work environment) or within a larger unit (such as one’s village, a community, or general culture). Thick description accurately describes observed social actions and assigns purpose and intentionality to these actions, by way of the researcher’s understanding and clear description of the context under which the social actions took place. Thick description captures the thoughts and feelings of participants as well as the often complex web of relationships among them. Thick description leads to thick interpretation, which in turns leads to thick meaning of the research findings for the researchers and participants themselves, and for the report’s intended readership. Thick meaning of findings leads readers to a sense of verisimilitude, wherein they can cognitively and emotively “place” themselves within the research context.” (Søgaard Jørgensen et al. 2013, 20)

This allows for insight into language, practices, internal structures and relations, and interests and motivations of actors in the initiative not visible to outsiders.

In the Rotterdam case, seven instances of participant observation were recorded for a total of about 10 hours. These included meetings, phone calls, and attendance at pick-ups. In the Berlin case, eight instances of participant observation were recorded for a total of about 14 hours. These included meetings, pick-ups, and an opening party.

Due to the limited amount of time to conduct participant observation (approximately one month for each initiative), the selection of types of events for participant observation was limited to events that happened during this time. Language was also a limiting factor in Rotterdam, as my understanding of spoken Dutch is only basic, so some details of conversations in Dutch were missed. Whenever possible, I asked for clarification, but in settings such as meetings this was not always possible.

A full list of participant observation event attendance is included in Annex 3 – Events and Meetings attended as Participant Observation.

1.1.2.3 Document review

Document review consisted of collection and analysis of three types of documents: primary source documents, scientific secondary source documents, and non-scientific media.

Primary sources include documents produced by the initiative itself, such as websites, pamphlets, meeting minutes, etc. This is important to understand how the initiatives

² This description in the Methodological Guidelines was taken from Ponterotto, J. G. (2006): Brief note on the origins, evolution, and meaning of the qualitative research concept ‘thick description’, *The Qualitative Report*, 11 (3), 538-549, retrieved the 3rd of June 2014 from <http://www.nova.edu/ssss/QR/QR11-3/ponterotto.pdf>

understand and present themselves and the context in which they operate. **Secondary sources** include media coverage of the initiative, such as newspaper articles, blogs, television appearances, films, and social media coverage. Media coverage influences “the societal and political transformative discourse of change and innovation” (Søgaard Jørgensen et al. 2013, 16). An initiative’s coverage in the media (how and how much they are discussed, why, in relation to what issues or narratives) can help locate them in this discourse and affect their influence. **Scientific literature** consist of reports, articles, and other scientific analyses relevant to the case study field and the initiative including those analysing public policies and institutional dynamics affecting the initiative. These can give “an understanding of the political and institutional frames influencing (constraining and/or supporting) a social innovation initiative is an important element in the analysis of mechanisms behind the (dis)empowerment related to social innovation” (Søgaard Jørgensen et al. 2013, 16).

Not only the content of the document itself, but also the context of the document’s production are taken into account in analysis: who created it, for whom, for what purpose, based on what assumptions, using or excluding what information? A list of documents is available in Annex 4 – Primary and Secondary source documents.

1.1.3 Data analysis

Empirical data gathered in the case studies is analysed using the TRANSIT conceptual heuristic. This framework is useful for analysing social innovation’s role in producing societal transformation for several reasons. It uses “a transition perspective to conceptualize social innovation in a systemic context” (Haxeltine et al. 2013), identifying the dimensions that connect agents to processes and types of change. It addresses the criticism of transition theory’s overemphasis on technology by attributing more importance to the social, including issues of power. The heuristic is explored in depth in chapter 2.2.

To answer the research question, I focus on the interaction between the business model and the four Dimensions of (Dis)Empowerment: governance, (social) learning, resourcing, and monitoring. According to the conceptual heuristic, the four Dimensions of (Dis)Empowerment are the processes that determine agents’ ability to influence the various shades of change. Each initiative has goals, i.e. results it seeks to achieve. This does not refer to performance goals such as sales volume, but goals in terms of change that an initiative wants to influence. These goals can be conceptualized in terms of the Shades of Change.

The initiatives under study share a business model. The model is the Community Pick-Up Point Scheme, introduced in detail in chapter 3. **The business model refers to both the structure and the growth process of an initiative; in CPPS, growth therefore refers to adding new pick-up points.** The two initiatives share common CPPS features, but also exhibit some differences which influence goals and the Dimensions of Empowerment in each case.

As the Dimensions of Empowerment determine Agents' ability to contribute to Shades of Change, if the goals of an initiative are to contribute to Shades of Change through a business model, the Dimensions of Empowerment determine their ability to achieve and adhere to their goals.

1.1.4 Research principles

Research was guided by principles outlined in the TRANSIT Methodology Guidelines. These principles are adapted below.

Firstly, a balance is required between **proximity and distance**. Proximity allows the researcher to be close to an initiative to know it well, but distance allows for independence from an initiative to be able to critically reflect on it. In both Rotterdam and Berlin, my first contact within the initiative was an individual I knew through volunteer activities outside of my work on this project with the Slow Food Youth Network. In Berlin, I knew the contacts within the organisation better and on a more personal level than my contacts within Rotterdam. Not only did I personally know some contacts within the organisations, but my work with this network may have also demonstrated to those I did not know well that we share some beliefs and values. Being involved in this network may have been a factor that facilitated my access to the initiatives and their openness and willingness to cooperate. I also ordered products from the initiatives in both cities, so that I could gain the experience of being a customer myself. These factors, however, may have influenced my perspective as a researcher, since the question touches on topics about which I hold personal beliefs. I have taken steps to counter this effect as much as possible by researching the topic and criticisms thoroughly in the literature, targeting points of criticism in my field research, and by reflecting critically on my perceptions, feelings, and conclusions during and after field research.

The research relationship was based on **reciprocity and mutual benefit**, meaning that the initiatives under study received some sort of benefit for investing their resources into participating in research, so that the activities and relationship were useful for both sides. In Rotterdam, discussions were held at meetings and in phone calls about interim results, and two strategy briefs were prepared on topics selected by Rechtstreeks based on a list of

suggestions I developed related to the research and my findings. In Berlin, a half-day seminar will be held on a topic related to my research and findings chosen by Food Assembly based on a list of my suggestions. Interim results have also been discussed at meetings in Berlin, and I have offered some suggestions for changes to an advertising publication based on my findings. In addition, both initiatives will be named on the TRANSIT project website and provided with a copy of the project report, which will be based on this thesis.

2 LITERATURE REVIEW

In order to understand how CPPS can contribute to a sustainable food future, this study looks at social innovation in food systems from a transition perspective. The literature review serves to explain concepts and explore ideas that play a role in the empirical analysis, as well as anchor this study in the context of established research.

The following sections first introduce the key concepts of transitions and transition theory, the connection between social innovation and transitions, and the phenomenon of Alternative Food Networks. After introducing these fundamental ideas, issues of growth in transitions are then explored. This is followed by an investigation of the impact and limitations of Alternative Food Networks as social innovations in societal transformations.

2.1 KEY CONCEPTS: TRANSITIONS, SOCIAL INNOVATION, AND ALTERNATIVE FOOD NETWORKS

Transition theory is a leading approach to understand societal transformations. Rotmans and Loorbach (2009) define a transition as “a radical, structural change of a societal (sub)system that is the result of a coevolution of economic, cultural, technological, ecological, and institutional developments at different scale levels” (Rotmans and Loorbach 2009, 185). Grin, Rotmans, and Schot (2010) identify five characteristics of transitions:

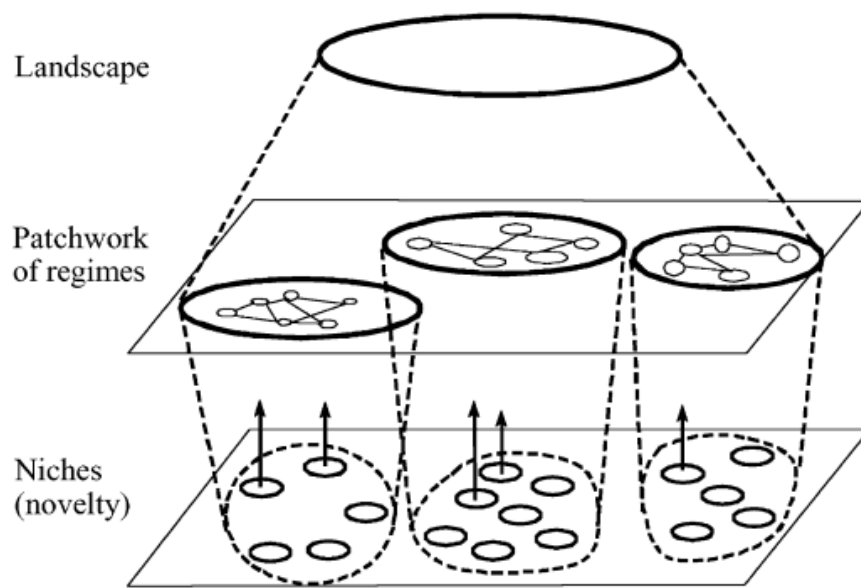
1. Transitions are co-evolutionary processes requiring multiple changes in socio-technical systems.
2. Transitions are multi-actor processes involving interactions between a variety of agents of different sizes and from different areas of society.
3. Transitions are radical systemic shifts – radical referring to the scope of change and not the speed.
4. Transitions are long term processes, sometimes involving rapid change after breakthroughs but generally the process of new socio-technical systems to emerging lasts 40-50 years.
5. Transitions are macroscopic and involve entire socio-technical systems.

Transitions are decentral responses to persistent, complex problems that are the result of flaws in societal structures (Rotmans and Loorbach 2009). Geels (2011) argues that since sustainability is a public good, transitions to sustainability often require (technological) solutions that do not perform as well under current institutional conditions (market and

regulatory configurations, consumer and social practices, etc.) and therefore require changes in economic framework conditions to grow and displace unsustainable regimes.

The Multi-Level Perspective (MLP) is one of the leading theories of transitions. It is a mid-range theory to conceptualize overall patterns and dynamics of sociotechnical transitions (Geels 2011). It hypothesizes that transitions are “outcomes of alignments between developments at multiple levels” (Geels and Schot 2007, 399). According to the MLP, developments at different functional levels influence each other, and transitions are only possible when developments in each scale strengthen each other (Grin, Rotmans, and Schot 2010)..

Figure 1 Sociotechnical nested hierarchy in the MLP



Source: Geels 2002, 1261

The MLP identifies three main levels relevant for transitions: niches, regimes, and sociotechnical landscapes (Geels 2002; Grin, Rotmans, and Schot 2010). According to Geels and Schot (2007), *niches* are pockets at the micro-level, also referred to as “incubation rooms”, where radical novelties (“new sociotechnical configurations” or “innovations”) emerge. Niches are embedded in the context of regimes. *Regimes* are the sets of rules and social groups that determine and stabilize sociotechnical trajectories. Rules in this sense refers to institutions, and cover a range of formal and informal rules ranging from regulations and standards to contracts to social norms and lifestyles (Geels 2011). Regimes are characterised by lock-in and change incurs incrementally. The *sociotechnical landscape* is the exogenous environment in which regimes and niches are embedded. It includes “not only the technical and material backdrop that sustains society, but also [...] demographical trends, political ideologies, societal values, and macro-

economic patterns” (Geels 2011, 28). The sociotechnical landscape is the context in which they operate and as such is beyond their direct control (Geels 2002; Geels 2011).

Complexity increases with the scale of the level, and with increasing complexity it becomes more difficult to bring about change (Morrissey, Miroso, and Abbott 2013). The levels proposed in the MLP are “not ontological descriptions of reality, but analytical and heuristic concepts to understand the complex dynamics of sociotechnical change” (Geels 2002, 1259)

2.1.1 Sustainable social innovation

Innovation is a key concept in transition theory. Social innovation is one type of innovation important for societal transformations. Social innovations are defined as “innovations that are social in both their ends and their means,” being specifically “new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations” that “are not only good for society but also enhance society’s capacity to act” (Bureau of European Policy Advisors 2011, 9). Social innovations can be completely new ideas, products, or practices, or new combinations or applications of existing ones. Social innovations are different from technical innovations because they are innovations which are “new responses to pressing social demands by means which *affect the process of social interactions*” (Bureau of European Policy Advisors 2011, 6, emphasis added). Social innovations may interact with, rely on, or be accelerated by technical innovations but are themselves social and not technical in nature. Haxeltine et al. (2013) identify “new social relationships (process related) and new social value creation (outcome related)” as the two common elements distinguishing social innovation from other types of innovation. Social innovation has received an increasing amount of attention in public and policy discourses; this increase has been linked to a number of developments (Murray, Caulier-grice, and Mulgan 2010; Bureau of European Policy Advisors 2011; Haxeltine et al. 2013):

- recognition of the need for broad and deep behaviour and technological change,
- failure of the current socioeconomic system to meet the needs of society and sustainability,
- recognition of the danger of sociotechnical lock-ins,
- as well as a shrinking role of the welfare state in society.

2.1.2 Transformative social innovation: closing the gap between transition theory and social innovation

Transition theory offers useful tools and concepts for understanding social innovation and its impact on society, because of its long-term and broad systemic view of innovation and change. However, the MLP that forms the basis of transition theory has shortcomings that make adjustments necessary if it is to be applied to social innovation or empirical contexts. Therefore, a new heuristic of transformative social innovation was developed within the TRANSIT project (Haxeltine et al. 2013).

Changes in behaviour and social dynamics and constructs are necessary – together with technological shifts – to bring about the societal transformations that characterise transitions. This is captured by the concept of transformative social innovation. According to Avelino et al. (2014),

“The notion of ‘transformative social innovation’ can be understood in three distinct ways: (1) as a specific *type* of social innovation, i.e. one that contributes to societal transformation, (2) as a social innovation with an *intention* to contribute to societal transformation, and (3) as the *process* through which social innovation contributes to societal transformation.” (Flor Avelino et al. 2014, 5)

As is the case with the MLP, this is not an all-encompassing model of reality but a heuristic device to “guide the analyst’s attention to relevant questions and problems” (Geels 2011). Details of the heuristic and the theory behind it are explored in more detail in chapter 2.2.5.

2.1.3 Transitions for a sustainable Food future

2.1.3.1 The status quo in food

In order to understand transitions in food, it is crucial to first understand *food systems* and *Alternative Food Networks*. A food system is a “chain of activities connecting food production, processing, distribution, consumption, and waste management, as well as all the associated regulatory institutions and activities” (Pothukuchi and Kaufman 2000, 113). The concept can be used to refer to one single global food system as a whole, or to specific subsystems within the global system. Sublevels are usually delineated by space (e.g. the food system(s) of a particular region or city).

The current food system in Europe is the result of decades of prioritization of technological rationalization and efficiency of production, labour reduction, and world market orientation (Spaargaren, Oosterveer, and Loeber 2012a). This grew out of the response to post-World-War-II realities of hunger, food shortages, and technologically

antiquated agriculture across Europe. This has led to a food system characterized by the following (Spaargaren, Oosterveer, and Loeber 2012a, 2):

- Concerns over health problems related to under-consumption (e.g. hunger) have been largely replaced by concerns over health problems related to over-consumption (e.g. obesity)
- Elaborate regulatory regimes for food safety have been established, yet risks and scares still exist that stem from the intensified nature of food production
- Limitations of time and space have been eliminated, increasing variety and choice and massively increasing the distance involved in globalized food value chains
- The retail sector has gained the most power in organization and orchestration of food value chains, farmers have lost power, and consumers have gained power
- Non-nutritional qualities like environmental and climate impact and animal welfare have gained importance in the public but has not yet resulted in major changes in food practices
- The cultural dimension of food has gained social importance, with lifestyle groups using food practices in different ways to articulate status and taste
- Global food and agriculture policies tend to focus on the production of quantity, rather than access, nutrition, or health concerns (Marsden and Sonnino 2012), which tend to be seen as falling under the realm of the private market (Pothukuchi and Kaufman 2000)

Since the 1970s, this rationalist and productivist approach has increasingly been questioned. For producers, processors, and retailers, this system has led to pressure to scale up, specialize, or exit the market; for farmers it has also meant more income instability and increased reliance on off-farm income (Diamond and Barham 2012; Mount 2012). On the side of consumers, “concerns over the source and content of their food, environmental impacts of production, food scares, food miles, and declining food nutrition and taste” have grown (Mount 2012, 111; Spaargaren, Oosterveer, and Loeber 2012b; Marsden and Sonnino 2012). Many consumers have lost trust in the dominant food regime (Spaargaren, Oosterveer, and Loeber 2012a).

There is recognition among a diversity of actors that the current system is unsustainable and undesirable, yet no consensus on how it should change (see e.g. Nedergaard 2008; Spaargaren, Oosterveer, and Loeber 2012b; Marsden 2013). Growing groups of consumers are “acting to re-value consumption and production in terms of a wider but more integrated set of security and sustainability criteria” (Marsden and Sonnino 2012). A variety of new approaches and narratives of change have developed in response

(Spaargaren, Oosterveer, and Loeber 2012b). These diverse responses are driving forth the current transition in food systems.

2.1.3.2 Transitions and social innovations in food systems: Alternative Food Networks

Both technical and social innovations are necessary elements of the transition to a sustainable food system capable of delivering the multi-functional benefits of food for the growing global population. Alternative Food Networks (AFNs) are a type of social innovation in food. AFNs are “forms of food provisioning with characteristics deemed to be different from, perhaps counteractive to, mainstream modes which dominate in developed countries” (Tregear 2011, 419). Though often extolled for their economic, social, and environmental benefits, prominent criticisms have pointed out that much of the AFN literature and practice assume these benefits without rigorous investigation into their truth (see e.g. Hinrichs 2000; Born and Purcell 2006; Tregear 2011). This is further explored in Chapter 2.3.

In Alternative Food Networks (AFNs), technical innovations are complemented by institutional innovations, which co-evolve and reinforce each other, reflecting changing ways of thinking and acting (Roep and Wiskerke 2012). AFNs, as social innovations, are niches that exert pressure on the existing regime, and their growth can contribute to societal transformation in the long term.

AFN is a broad term used as a catch-all for a variety of non-conventional approaches to food provisioning (Tregear 2011). The term encompasses diverse innovations such as community-supported agriculture, organic food networks, novel marketing and direct marketing practices, urban agriculture and gardening, and local food networks, to name some (Tregear 2011; Spaargaren, Oosterveer, and Loeber 2012b). According to Feenstra (1997) “rooted in particular places, [AFNs] aim to be economically viable for farmers and consumers, use ecologically sound production and distribution practises, and enhance social equity and democracy for all members of the community” (as cited in Tregear 2011, 421). Critics, however, point out that these characteristics may not apply to all AFNs, and certain characteristics of AFNs are sometimes conflated with their goals (see section 2.3.2).

AFNs may be commercial or non-commercial and encompass for-profit businesses, NGOs and non-profits, and social groups and movements (Spaargaren, Oosterveer, and Loeber 2012b). Many AFNs represent novel producer-consumer relations, redefining aspects of the food market. Yet AFNs also shape the cultural agenda in food transitions, particularly in relation to “discourses, norms and values” (Spaargaren, Oosterveer, and Loeber 2012b, 317). Urban regions are “becoming the fulcrum for innovative forms of (alternative) food

production and consumption – both in developed and developing countries” (Marsden and Sonnino 2012).

AFNs serve as “seeds and role models for increasing sustainability in food, and they experiment with and foreshadow the new food regimes of the future” (Spaargaren, Oosterveer, and Loeber 2012b, 323). As AFNs grow, they present a stronger challenge to the dominant regime. Attempts to adapt can already be seen by regime actors, such as conventional supermarkets and food processors who increasingly incorporate organic products; alternative movements react to this by continuing to innovate and differentiate themselves from the regime (Seyfang 2008).

The growth of AFN niches has already put food systems on an irreversible trajectory towards change; yet as Spaargaren, Oosterveer, and Loeber (2012b) point out, “modern food futures do not just emerge or drop from the air. They have to be constructed, trained, learned and made to work by a diverse set of (organized and individual) actors” (Spaargaren, Oosterveer, and Loeber 2012b, 316). This requires the further growth of AFNs as part of the transition process, including policy support.

The following chapters examine theory on growth of niches and the impact and potential of AFNs to transform societies.

2.2 HOW DOES GROWTH OCCUR? PATHWAYS, PROCESSES, AND SCALES

The question of growth or scaling is a key concern of transition theory. However, there is a glaring lack of consistency in the literature on growth. The most commonly used term when referring to growth is “scaling”; however, authors use the term arbitrarily to refer to a wide variety of different phenomena and concepts without coherence. There does not yet exist a framework for adequately describing or understanding growth in the transition literature. In order to avoid creating another new definition for scaling, a convoluted term already beset with inconsistency in the literature, I depart from the term and instead use the **term *growth* to denote the overarching concept of the increase of influence of a niche or innovation on society** (see also chapter 1.1 **Error! Reference source not found.**). Taking this more broadly encompassing definition allows the inclusion of all relevant conceptual work from transition theory that denotes growth as defined above or a characteristic thereof. This includes existing work on scaling. This notion of growth does not, however, directly relate to the concept of growth as used in economics. Concepts such as “post-growth” or “degrowth” are therefore not meant to be denoted by this definition.

In the following subchapters, I gather the coherent growth- and scaling-related concepts from the transition theory literature and separate them into three categories based on the

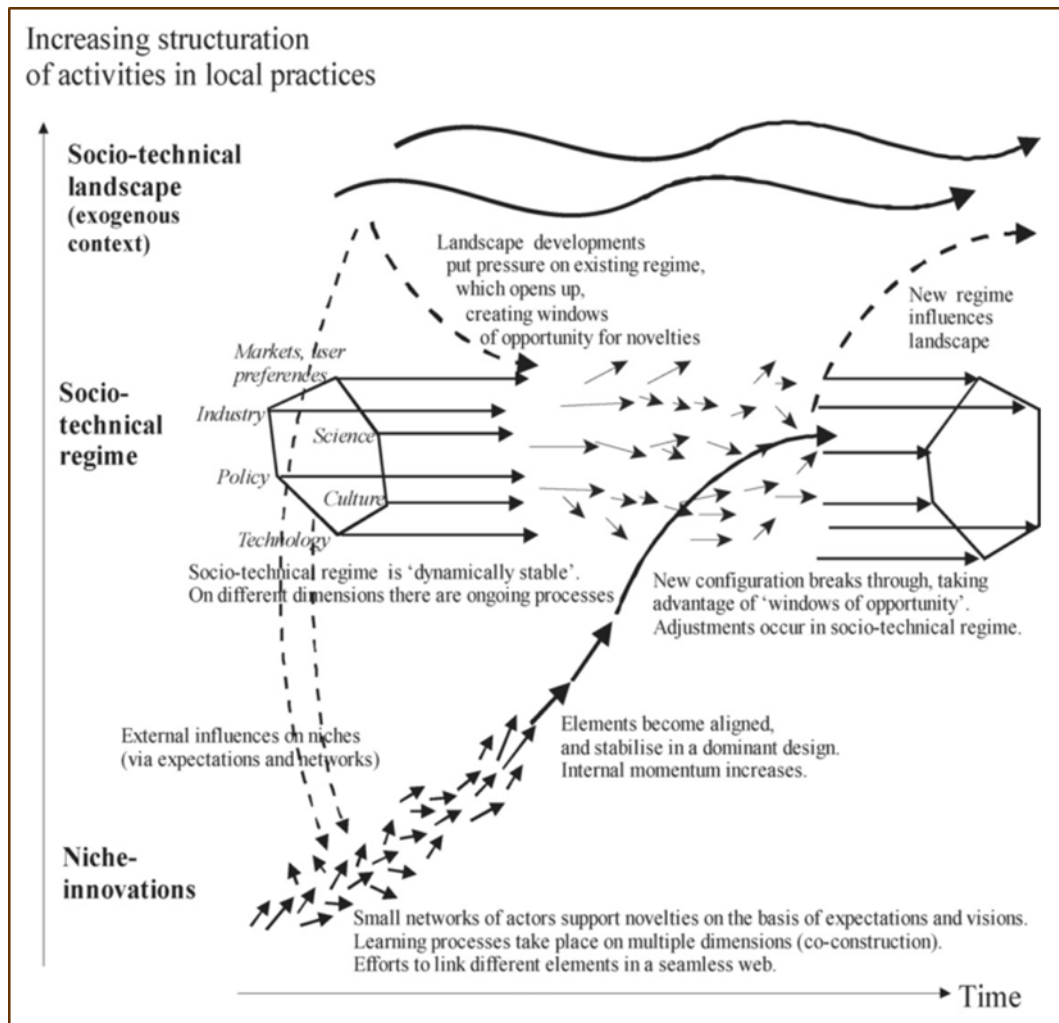
type of phenomena they describe: pathways, processes, and scales. An innovation grows **along a pathway, through processes, and across scales**. Pathways, processes, and scales are therefore not exclusive concepts, but categorisations of concepts found in the literature to give the discussion of growth more structure.

2.2.1 Pathways: trajectories of change

The growth of innovative niches is necessary for societal transformation towards sustainability. Pathways describe **the sequence of interactions between levels** in the MLP in a growth trajectory. In order for niches to grow and influence regimes, they need “a configuration that works” (Roep and Wiskerke 2012, 223). Configuration here refers to both how the innovative niche itself works as well as how it fits into the multi-level context. In the MLP, niches function as “*sources of systemic change if processes at other levels are supportive,*” for example if landscape-level developments put pressure on regimes to become more sustainable (Smith 2007, 427). Figure 2 from Geels and Schot (2007), adapted from Geels (2002) illustrates the basic multi-level dynamics of transition processes. According to the MLP, transitions follow a basic general pattern: “(a) niche-innovations build up internal momentum, (b) changes at the landscape level create pressure on the regime, and (c) destabilisation of the regime creates windows of opportunity for niche-innovations” (Geels 2011, 29).

This basic pattern is illustrated in Figure 2. The higher levels put constant pressure on the niche level through e.g. networks. Transitions are not just the result of one single sociotechnical innovation but an accumulation of innovations as well as changes in larger dimensions such as networks, regulation, infrastructure, markets, and culture (Geels 2002; Geels and Schot 2007).

Figure 2 Dynamics of transitions in the MLP



Source: Geels and Schot 2007, 401

Pathways have been identified as the different trajectories of change within this basic pattern. Geels and Schot (2007) identify four different transitions pathways differing in terms of timing and nature of multi-level interactions. These are summarized by Geels (2011) as follows:

“Transformation: In this pathway, landscape developments exert pressure on the regime when niche-innovations are not well-developed. Incumbent actors modify the direction of innovation activities and development paths, which leads to gradual adjustments of regimes to landscape pressures. Although niche-innovations do not break through in this path, experiences from niches can be translated and accommodated (often in a watered-down form) in the regime (Smith, 2007).

Reconfiguration: In this pathway, niche-innovations are more developed when landscape developments exert pressure on regimes. If niches are symbiotic to the regime, incumbent actors can adopt them as ‘add-ons’ to solve local problems. This incorporation can trigger subsequent adjustments, which change the regime’s basic architecture.

Technological substitution: In this pathway, competitive niche-innovations are well developed when landscape developments exert pressure on regimes. Tensions in the

regime form a window of opportunity for the break through of niche-innovations that replace the regime. An alternative route is that niche-innovations gain high internal momentum (because of resource investments, consumer demand, cultural enthusiasm, political support, etc.), in which case they can replace the regime without the help of landscape pressures.

De-alignment and re-alignment: In this pathway, major landscape pressures first cause disintegration of regimes (de-alignment). Then, taking advantage of this 'space', multiple niche-innovations emerge, which co-exist for extended periods (creating uncertainty about which one will become the winner). Processes of re-alignment eventually occur around one innovation, leading to a new regime." (Geels 2011, 32)

Striking in the pathways concept is that in Geel's (2011) definition, pathways are defined from a backwards-looking perspective. In this perspective, one pathway is followed in each case. Yet a forward-looking perspective in transition theory rests on the idea that there are multiple possible pathways and complex interactions between them (Spaargaren, Oosterveer, and Loeber 2012b).

2.2.2 Processes: types of growth actions

Processes are the verbs of growth; they are **actions through which influence increases**. The concepts arise from the MLP. The literature identifies the following processes of growth in transitions:

- **Translation:** a regime incorporates (aspects of) niche innovation into the regime. Niches and regimes have a "dynamic and direct relationship with one another, in which ideas, practices and events in one are translated into ideas and practices in the other. Sometimes these are mutual adaptations but on other occasions, the adaptation is antithetical and a niche or regime is responding to unwelcome developments in the other" (Smith 2007, 443). Smith identifies a paradox of niche-regime interactions: the creation of sustainable alternatives to regime sociotechnical practices requires new configurations, and "their subsequent influence is dependent upon an ability to articulate with incumbent regime dimensions" – meaning there are enough commonalities between the niche and the regime to connect (Smith 2007, 444). In the example of organic farming, the growth of consumer interest in the organic niche led to regime incorporation of some aspects of the original organic ideal in a process Smith (2007) describes thusly: "Organic produce was not transforming the food regime; it was simply a new, high value ingredient threading its way into conventional food socio-technical practice" (Smith 2007, 442). This led to more innovation in organic farming to re-distinguish the niche from the regime.
- **Deepening:** "a learning process through which actors can learn as much as possible about a transition experiment within a specific context" (van den Bosch and Rotmans

2008, 29).³ This leads to the development or strengthening of a specific innovation within a niche. This can be understood as an innovation becoming more established within its niche context, but does not address the influence of a niche outside of this specific context (van den Bosch and Rotmans 2008).

- **Broadening:** “repeating a transition experiment in different contexts and linking it to other functions or domains” (van den Bosch and Rotmans 2008, 32). Broadening can allow similar experiments in different contexts to build on each other over time to help establish an emerging niche. There are two types of results of broadening: “the new or deviant culture, practices and structure get diffused or adopted in a variety of contexts” or “the new or deviant culture, practices and structure fulfill a broader function” (van den Bosch and Rotmans 2008, 32). This leads to the adaptation of a niche innovation to multiple contexts.
- **Scaling-up** (as used in van den Bosch and Rotmans 2008): “embedding a transition experiment in -new- dominant ways of thinking (culture), doing (practices) and organizing (structure), at the level of a societal system.” (van den Bosch and Rotmans 2008, 33) In scaling-up, “sustainable practices that are initially deviant or unusual, become the dominant or mainstream practice” (van den Bosch and Rotmans 2008, 44). This mechanism may follow one of the four paths identified by Geels and Schot (2007), variously modifying or replacing the regime to move the innovation from niche to mainstream. Van den Bosch and Rotmans (2008) see deepening, broadening, and scaling-up as processes that influence and build on each other.
However, the term scaling-up is used in the literature to refer to a plethora of different concepts including what I identify as both processes and scales (van den Bosch and Rotmans 2008; Seyfang and Haxeltine 2012).
- **Anchoring:** “the process in which a novelty becomes newly connected, connected in a new way, or connected more firmly to a niche or a regime” (Elzen, van Mierlo, and Leeuwis 2012, 3). Anchoring refers to the initial stages of influence of an innovation, what Elzen, van Mierlo, and Leeuwis (2012, 3) refer to as “emerging forms of linking”. Anchoring can happen within a niche, between niches, or between a niche and a regime. All of the processes described above can also be thought of in terms of anchoring when in the early stages.

³ A transition experiment refers to “an innovation project with a societal challenge as a starting point for learning aimed at contributing to a transition” (van den Bosch and Rotmans 2008, 13). Transition experiments are distinguished from innovations because they have the *intention* of contributing to societal transformations. Transition experiments are a therefore type of innovation and a way of locating innovations within the context of a transition. As this section deals only with innovations that contribute to societal transformations, transition experiments are treated the same as innovations here.

2.2.3 Scales: quantitative measurements of growth

Scales refer to **quantitative measurements** of growth. Scales are different from processes and pathways because scales describe quantitative changes, whereas processes and pathways describe qualitative changes. Douthwaite et al. (2003) recognize three types of scales (expressed by adding a qualifier to the verb “scaling”): geographic scaling, scaling up (to more and different stakeholders), and spatial scaling-up (Douthwaite et al. 2003, 247). This grouping, however, ignores some distinctions within these categories that are important when analysing how niches grow. Therefore, building on the three scales proposed by Douthwaite et al. (2003) and explored by van den Bosch and Rotmans (2008), the following five categories scales of growth are differentiated:

- **Geographical spread:** the same innovation is applied in different locations
- **Spatial scope:** the increase in a niche’s spatial scale of operation, e.g. from farm to watershed, from neighbourhood to city, from city to country
- **Amount of users or stakeholders:** the number of users of or stakeholders involved in a niche increases, e.g. the number of female farmers using an innovation increases
- **Type of users or stakeholders:** the diversity of users of or stakeholders involved in a niche increases, e.g. more socioeconomic groups are incorporated into membership or policymakers are involved in advocating for a niche
- **Sector or domain:** similar to broadening, a niche innovation is applied to different fields, e.g. from food provision to durable consumer good provision

Growth may occur across several scales simultaneously.

2.2.4 Criticisms of concepts of growth in the MLP

Aside from the general inconsistency in the literature around the issue of scaling and growth, the MLP has other shortcomings for investigating social innovation and growth. The MLP is criticized for treating landscape developments as exogenous (Haxeltine et al. 2013). This can be seen in the concept of transition pathways as well. There is no room in this concept to consider the influence of niches on landscape developments, and the influence of landscapes on niches is not made explicit. In addition, since it is unclear what the boundaries between the levels are in practice, differentiating between e.g. regime shift or incremental change within a wider regime can be a matter of perspective (Berkhout, Smith, and Stirling 2004). The MLP has also been criticised for having an overly functionalistic approach, neglecting agency in its understanding of transformations (Geels and Schot 2007). This makes application to practice difficult.

It is important to note that increasing *size* along one or multiple scales should not be conflated with increasing *impact* (Bradach 2010). Growing in size may not necessarily lead

to a growth in impact (or be the most effective way to increase impact), and increasing impact may not be dependent on growing in size. There is evidence that a critical mass in terms of “strength” of a niche⁴ is a prerequisite for increasing impact, yet what the critical mass is remains context dependent (Bradach 2010, xiii). Since the MLP still has gaps in accounting for agency and power in change processes (Haxeltine et al. 2013), the connection between e.g. transition pathways and impact is unclear, and the concept of impact is left as an implicit element.

There may be several reasons why models do not yet exist in transition literature to explain impact growth. Impact is difficult to define and even more difficult to monitor, and becomes more difficult with increasing scales of complexity (Morrissey, Miroso, and Abbott 2013). This poses a challenge both theoretically and practically for actors whose goals include social impact.

If we let go of the niche-regime dynamic and look instead at the influence of an innovation on society, it becomes clear that a new framework is needed to understand growth. The TRANSIT heuristic framework explored in the following chapter seeks to close this gap.

2.2.5 The TRANSIT heuristic: transition theory for social innovation

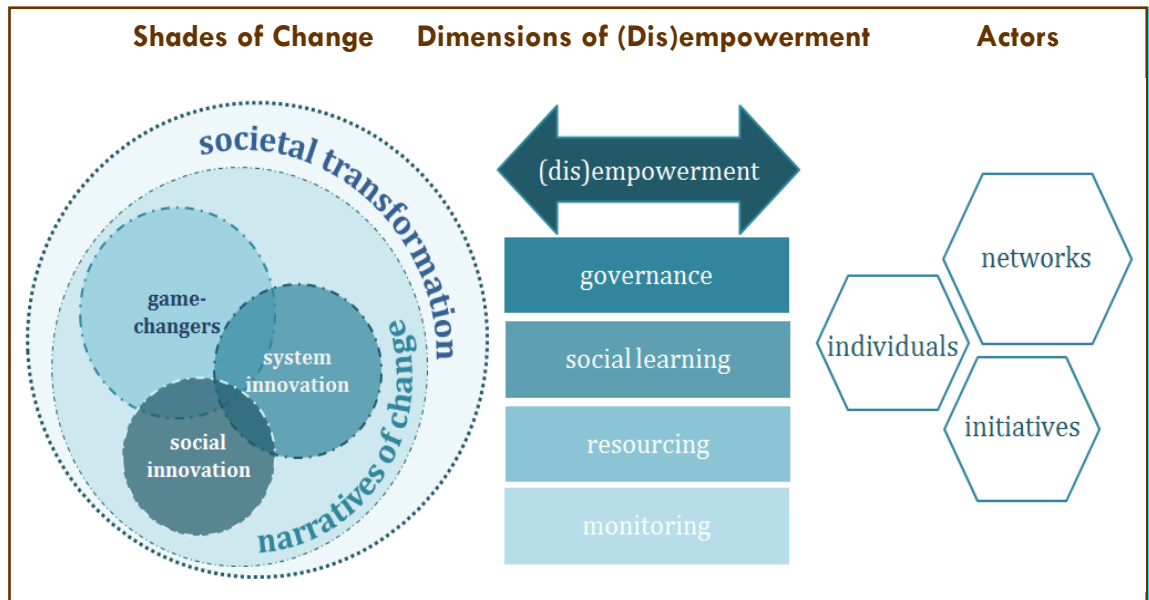
The TRANSIT heuristic framework represents an effort in transition theory to move beyond the MLP. It is specifically tailored to understanding social innovations. In the heuristic, five “shades of change” (Flor Avelino et al. 2014, 5) are distinguished: social innovation, system innovation, game changers, narratives of change, and societal transformation. This conceptual heuristic was inspired by the Multi-Level Perspective and influenced by social innovation theory (Haxeltine et al. 2013). It responds to criticisms of the ambiguity of the divisions between levels and the exogenous status of the societal landscape level in the MLP by shifting the focus from levels of change to shades of change (Flor Avelino et al. 2014, 7–8), which refer to types of change. All of the shades interact with and influence each other in different ways depending on the context. The shades refer to types of change, but without defining specific levels at which they must occur or pathways or interactions they must follow. This framework hypothesizes that “societal transformation is shaped and produced by particular patterns of interaction between social innovation, system innovation, game-changers and narratives of change” (Avelino et al. 2014, 8). The four Dimensions of (Dis)Empowerment of governance, social learning, resourcing, and monitoring empower or disempower actors (individuals, networks, and initiatives) to contribute to these processes. Empowerment refers to

⁴ The text refers specifically to organisations, but the notion is expanded to apply to niches

“the attainment of resources, strategies, skills and willingness. The ‘empowerment of an actor’ means that this actor attains the necessary resources, strategies, skills and willingness to exercise power. [...] An actor can also be disempowered by losing resources, strategies, skills or willingness.” (F. Avelino and Rotmans 2009, 557)

Actors can both support or hinder change.

Figure 3 Conceptual heuristic to explore the dynamics of transformative social innovation



Source: adapted from Avelino et al. 2014, 8

The TRANSIT heuristic builds on transition theory and adapts transition theory insights to the case of social innovation (Haxeltine et al. 2013). Rather than focusing on levels, the TRANSIT framework conceptualizes societal transformation in terms of five shades of change. By shafting away from the rigidity of the levels, it becomes possible to account for complex, coevolutionary interactions between different types of change, as well as between shades of change, dimensions of disempowerment, and agents of change. The four dimensions of (dis)empowerment that affect how a socially innovative niche influences societal change – governance, social learning, resourcing, and monitoring – empower or disempower actors (individuals, networks, and initiatives) to contribute to change processes.

This heuristic is well suited for answering questions relating to growth, such as the research question of this study. Firstly, incorporating the element of empowerment in the model integrates the issue of agency and power (Flor Avelino et al. 2014). This makes the heuristic better suited for understanding the growth of social innovations as an *increase in influence* on society. The focus shift from innovations and niches, as in the MLP, to actors reinforces this. In the end, innovations and niches themselves do not determine their own paths or influence; rather, actors within niches determine what happens with innovations.

This is an important distinction especially for social innovations, as they are even more essentially linked to social practices than technical innovations. Secondly, in the TRANSIT heuristic, innovations can influence many different shades of change simultaneously, without these types of change being bound to a certain size or pathways. The heuristic thus allows for the researcher to focus on the impact of initiatives on actual change rather than interactions between arbitrarily defined levels. This makes the heuristic useful for understanding growth as defined here.

Since this heuristic is still in development, it is important to explore its limitations. It does not claim to understand what the dynamics of interactions between the shades of change are yet. The actual processes of transformative social innovation are therefore yet to be defined in this framework. It also does not solve the problem of context-specificity, subjectivity, and arbitrariness in defining impact when applied to specific cases. To solve this issue, a case should define impact in terms of the shades of change, but in more concrete terms as relates to the context of the case. It is for these reasons that it is important to test the heuristic in empirical case studies, to better isolate the interactions between the elements of the heuristic and improve understanding of transformative social innovation.

2.3 ALTERNATIVE FOOD NETWORKS: PIONEERING SUSTAINABLE FOOD NICHES

Alternative Food Networks are the social innovations developing concrete solutions to the problems of the dominant food system. They “reconfigure the boundaries between political action and consumption, between public organisations and business, and between citizenship and private interests and lay actors and experts,” becoming the “drivers for system innovation” (Brunori, Rossi, and Guidi 2012, 5) According to, Brunori, Rossi, and Guidi, (2012),

“The growth of these alternative production-consumption networks can provide the necessary diversity to a system basically shaped according to a unique dominant model, allowing the development of that plurality of organisational forms that is more suitable to the needs of society and of the environment.” (Brunori, Rossi, and Guidi 2012, 27)

Since CPPSs are new forms of AFNs, there is no literature specifically about the CPPS business model. Therefore this chapter contains an investigation of literature on AFNs, focusing on elements of AFNs that are relevant to the CPPS model. The next sections explore the impact and potential of AFNs to bring about a sustainable food future, as well as their limitations.

2.3.1 Positive impact and potential of AFNs

2.3.1.1 Environmental benefits

AFNs can encourage more environmentally sustainable food production and consumption choices, as well as encourage critical thinking about other consumption and production impacts. Common features of AFNs include environmentally friendly, organic, and/or holistic production and consumption, local and short supply chains to reduce the impact of transport, measures to reduce food waste such as (traditional) preserving methods and doing away with superficial cosmetic standards, and emphasis on seasonally grown produce that makes the most of local climate and available resources. These features may or may not always be present in every AFN, or be present to differing degrees, but generally play a role (Tregear 2011). Actual impact varies between AFNs and farms depending on individual farm management decisions and consumption practices (see e.g. Weiske et al. 2006; Weidema et al. 2008; Benbrook et al. 2010).

Smaller AFNs that are based on transparency may also provide a way for producers who are too small to afford organic or other sustainability certifications to find a market for their sustainably produced products, since AFNs provide an alternative route for consumers to build trust in producers (Spaargaren, Oosterveer, and Loeber 2012b).

Though AFNs can give an economic impulse to producers and consumers to be involved in more sustainable food provisioning systems, non-economic concerns play a significant role. Many farmers who implement environmental measures on their farm do not do so for strictly economic reasons, though these do factor in as well (Pike 2008). AFNs can present a way for ideologically-motivated producers to find channels to make their environmentally friendly production method economically viable beyond what subsidies can achieve (Kjaernes and Torjusen 2012).

The impact of AFNs may stretch beyond the impact of products consumed through the network. Organic food, for example, is associated not only with different product qualities, but also lifestyles, culture, and ideals which see naturalness and a connection with food as central to wellbeing (Kjaernes and Torjusen 2012, 96). Rossi and Brunori (2010) find that

“Innovation in social practices around food, as empirical evidences (sic.) show, can encourage broader changes in consumption behaviours (beyond food and beyond purchasing of goods), and stimulate other processes of awareness and citizenship raising (about more general issues, such as development patterns and their environmental and social implications)” (Rossi and Brunori 2010, 1927; see also van Gameren, Ruwet, and Bauler 2014).

In the process of adjustment to new types of products and ways of provision, consumers and producers undergo learning and critical processes that can spill over from food to other lifestyle aspects.

2.3.1.2 Human health

AFNs may also encourage healthier consumption patterns among participants involved (Wekerle 2004; Levkoe 2006), though strong empirical evidence on this is thin (Born and Purcell 2006). Organic and other qualities typical of AFN products are often conflated with health by consumers and the media without critical investigation of individual products or practices (Lockie 2006; Born and Purcell 2006).

There is still much conflict among the scientific literature on the health benefits of AFNs, with most studies focusing on the effects of organic food. A recent metasurvey found that organic products contained higher concentrations of antioxidants and lower concentrations of pesticides and cadmium (Barański et al. 2014). Studies have not found significant differences in nutritional impact from consuming organic or non-organic foods (Forman et al. 2012).

It is also important to consider the positive health impact for people living in rural areas of lower impact and organic farming, less or lower-impact transportation, and more biodiverse production compared to land use dependent on synthetic chemical inputs, high antibiotic use, and high transportation volume (Pimentel 2005; Zeliger 2008; FAO and WHO 2013; Jechalke et al. 2014). This aspect of AFN-related health impacts receives comparatively little attention in the literature.

Contrary to conventional food systems, which value food as capitalist commodities, AFNs can present a channel for valuing the health and nutrition dimensions of food provision and promoting healthier nutrition choices. Marsden and Sonnino (2012) argue that the shift in the conventional food system since the second half of the 20th century, especially post-productivism since the 1980s, has decoupled food policy and prices from public health, food security, and environmental health concerns. They identify the shift to localism, a key aspect of many AFNs, as a pathway to reconnect food prices to other values, such as nutrition and human and environmental health (Marsden and Sonnino 2012).

2.3.1.3 Economic benefits

AFNs with a local or regional focus may bring economic growth and secure livelihoods to the area by promoting new and diverse economic activity. AFNs are supported as means for rural regeneration and development that create economic opportunities that cannot be relocated (Karner 2010). They also provide producers with an important alternative market channel to traditional large scale buyers; farmers who in many cases were

formerly dependent on single buyers for their produce can use AFNs to diversify their customer base and reduce the risk associated with reliance on a single large buyer, strengthening their power in the supply chain (Seyfang 2008).

AFNs lie along a scale of commercial- and market-orientation. Some networks reject marketness at a fundamental level, relying on self-provisioning or varying degrees of barter of labour and goods instead of money (Jarosz 2008). Some question market orientation very little and capitalize on profiling their products as high value niches within the existing food system (Lockie 2009). Depending on the structure of AFNs, they can offer producers access to a market that values certain qualities beyond products' commodity values for which industrial buyers are unwilling to pay. This could include qualities such as organic or other environmentally friendly production methods, local provenance, non-conventional types of products such as rare produce varieties or traditional products, or non-conventional consumption experiences (Kjaernes and Torjusen 2012). Though price remains a central aspect of AFN consumers' consumption decisions, they are often influenced by other qualities such as perceived environmental impact (Hinrichs 2000). AFNs can therefore act as a channel for valuation of these non-commodity qualities.

AFNs that shorten the supply chain can also allow producers to obtain a higher percentage of the consumer price, offer their products to consumers at a lower cost, offer consumers higher quality for a certain price, or all of the above (Tregear 2011).

2.3.1.4 Community building, social relations

Food provision and consumption choices contribute to defining social standing and group identity (Spaargaren, Oosterveer, and Loeber 2012a; Brunori, Rossi, and Guidi 2012). In addition, provision relationships in AFNs are often characterised by a level of social embeddedness higher than that of most conventional food provisioning channels (Hinrichs 2000). Sharing and (co-)creating consumption choices can foster social identity and group belonging. AFNs can also support social ties and empower participants to influence their social and physical contexts by creating opportunities for placemaking and new social connections. Empowerment and stronger social relations fostered through AFNs can encourage social cohesion, social learning, and social and political participation among previously marginalised groups (Wekerle 2004; Levkoe 2006). Many AFNs actively integrate components of community building and knowledge sharing into their operations.

2.3.2 Problems and limitations of AFNs

2.3.2.1 The “alternative” paradox

One of the most fundamental problems with AFNs is reflected in their name: as “alternative” food networks, they inherently distinguish themselves from mainstream actors and qualities of the food system. However, as AFNs or aspects of AFNs grow and become more integrated into societal systems, they necessarily lose some aspects of their alternativeness. The name in itself therefore implies an inescapable exclusivity which presents a barrier for the transition to sustainability in food.

Many authors have explored the implications of AFN growth and alternativeness for sustainable food systems. Smith (2007) examines the organic movement, identifying a shift due to the growth of the organic market. As demand and production of organic foods grows, the food industry begins to play a role by integrating organic products into processed food and offering organic products in supermarkets. This leads to tensions in the movement which further radicalizes some actors, leading to new innovations to distinguish small-scale AFNs from industrial organic, in order to create a continued distinction between the ‘authentically’ alternative and the corruption of the organic ideal by industry (Smith 2007). This is largely driven by a fear that mainstream involvement will undermine the principles upon which the movement was originally based (Lockie 2009).

The discomfort with mainstream actors’ involvement in the realm of AFNs also has social implications. When large mainstream actors begin offering e.g. organic or local products, they can grow the market and offer products at lower prices and with different opportunity costs, allowing more groups of consumers to participate in the market for sustainable food. For example, Walmart’s decision to offer organic products opened the market to socioeconomic groups that before were largely excluded from the organic market, and meant that the market for organic products would grow tremendously (Lockie 2009). Lockie (2009) describes this tension as follows:

“What we see here are competing attempts not simply to attract the “consumer dollar” but to define how people ought to behave as consumers and how producers and retailers ought to facilitate and shape that behavior. At issue here is not whether certified organic foods offer, by themselves, the “correct” consumption choice, but how competing projects have emerged to define both the “correct” form and context for organic food consumption, and the specific people to whom those choices should be made available “ (Lockie 2009, 197)

AFNs’ resistance to the spread of alternative, sustainable practices can therefore have negative consequences for social inclusion and the long-term growth of sustainable solutions. AFNs in the global north are often criticised for involving largely white,

educated, wealthier consumers, either by actively targeting this consumer group or through unintentional exclusionary design (Hinrichs 2000; Tregear 2011; Kato 2013; Anguelovski 2014). In her analysis of the role of embeddedness and social relations in direct agricultural markets, Hinrichs (2000) observed that many AFNs involve “social relations where the balance of power and privilege ultimately rests with well-to-do consumers. Struggling farmers and poor consumers, in contrast, must weigh concerns with income and price against the supposed benefits of direct, social ties” (Hinrichs 2000).

2.3.2.2 Conflating ends and means

One central criticism of AFNs is that they often conflate ends with means when it comes to qualities of the networks, their activities, or their products. Many scholars have noted the tendency to assume intrinsic benefits of AFNs and their products such as health, environmental sustainability, or strengthened social ties without rigorous or empirical investigation into their truth (Hinrichs 2000; Born and Purcell 2006; Tregear 2011). For example, the origin of and distance travelled by food may have no connection to health or quality, since these depend on *how* and not *where* the food was grown, processed, stored, and transported (Born and Purcell 2006). It is also debated whether local AFNs are more energy efficient, since in some cases more decentralized food provisioning networks may use more fuel per unit sold (Mundler and Rumpus 2012). AFNs are also criticised for assuming intrinsic social benefits of participation of AFNs. Mount (2012) portrays AFNs especially critically, claiming that “the notions of reconnection, direct exchange, and shared goals and values are reductionist caricatures that essentialise both form and participants, and overlook important evidence of hybridity, flexibility, and fetishization” (Mount 2012, 110). Despite often professing social empowerment, inclusion, or community building as a goal, AFNs may still operate in ways and spaces that exclude socioeconomically disadvantaged groups (Tregear 2011; Kato 2013; Anguelovski 2014).

2.3.2.3 Redistribution of costs

Participation in AFNs can bring producers many benefits, but not without costs. Typically, farmers in AFNs are subject to very high demands to diversify their production and activities. Fulfilling many small, individual orders as opposed to few large orders, as well as the personal contact desired in many AFNs can mean more labour and expenditures are required in sales, administration, logistics, processing, and transportation (Jarosz 2008). The switch to new types of consumers and their demands may also require significant learning processes by farmers, and the logistical and infrastructural switch implies new investments and transaction costs (Mount 2012). Many farmers remain dependent on off-farm income of at least one household member (Diamond and Barham 2012; Mount 2012).

Participation in AFNs often also requires more labour in food provision. This may have gender related implications, as women are often responsible for food provision and preparation and are therefore disproportionately burdened (Little, Ilbery, and Watts 2009; Tregear 2011).

2.3.2.4 Limits of political consumerism

AFNs' contribution to the transition to a sustainable food system predicates on the assumption that consumption is a means by which to affect change in a socially desirable direction – in other words, that it is possible to buy a better world. According to Klintman and Boström (2012, 107), “the food sector is probably the one in which green political and social aspects are discussed the most through the lens of consumerism”. Brunori, Rossi, and Guidi (2012) make an observation that sums the problem of this approach up as follows: “*Provided that they are informed as to where the product comes from or how it is produced, consumers can exert their choice as a political act.*” (Brunori, Rossi, and Guidi 2012, 3, emphasis added). If consumers have perfect information, which assumes not only transparency but consumer initiative in obtaining the information and considering it in consumption decisions, it is possible for them to use consumption to pursue a political goal. Even if the assumptions about information and access are met, it does not mean that consumers will or can always choose to consume in this way.

Although retailers and processors have the most power over the food value chain, the consumer is often characterised as responsible for driving change. This reliance on ‘political consumerism’ or the ‘citizen consumer’ means that state actors and upstream actors in the value chain place responsibility for instigating change on consumers (Spaargaren, Oosterveer, and Loeber 2012b). Localization and the reliance on the ‘citizen consumer’ can be seen as an “appeal both to “left” ideals of political participation and “right” ideals of non-interference in markets,” which “may be used to justify the withdrawal of state services and protections” (DuPuis and Goodman 2005; Lockie 2009, 195)

Although consumers do play an integral role in supporting change, their power is limited to reacting to the actions and offerings of upstream actors, which may not be transparent. As Lockie (2009) argues,

“by themselves, consumer choices do little to challenge (retail control and decisions over the supply of goods) since the refusal of individuals to buy a particular product does not necessarily result in the supply of a more desirable alternative.” (Lockie 2009, 200)

The effectiveness of this strategy depends on consumers' ability to clearly articulate their desires and concerns. Yet, the inability to identify consumer desires, to follow and connect

with many diffuse actors, and to integrate often contradictory sets of food-related concerns have been cited as major hurdles in addressing food system challenges (Pothukuchi and Kaufman 2000; Lockie 2009). In addition, reliance on the consumer to follow a socially optimal consumption pattern falls prey to all behaviourist criticisms of neo-liberal economic theory and approaches, including problems of bounded rationality, incomplete or overwhelming information, and biases (Pike 2008; van Bavel et al. 2013). This approach also “obfuscates the manner in which information, product supply, and regulatory regimes are influenced or controlled by other actors such as large agrifood firms” (Lockie 2009, 196).

Not only must consumers be able to choose the right products for political consumerism to be possible or effective, they also need the capacity “to co-produce – together with other actors – new material and immaterial frames of daily life and to set new boundaries between consumption and citizenship, consumption and production, goods and services, and the private and public, domestic and civic realms” (Brunori, Rossi, and Guidi 2012, 2). AFNs can help with this by expanding the consumption possibilities open to consumers, but not all involve consumers in this way – and not all consumers are interested in investing their time in these processes.

Consumers in most cases do not completely forego participation in mainstream food systems when participating in AFNs. Instead, they “remain consumers in the food regime, participating in one or the other to the extent that it is convenient” (Smith 2007, 443). This means that political consumerism will never be a panacea to address all food system problems – though it can be part of the solution.

2.3.2.5 How can policy respond?

AFNs often don’t fit well with existing regulation or policy, e.g. hygiene measures, which can create hurdles to their expansion (van Gameren, Ruwet, and Bauler 2014). AFNs sometimes prefer to be not regulated, since they see the trust integral to their identity as more effective than regulation and don’t trust the regulatory system. If they grow, they may attract more attention and be required to be subject to regulations in areas where they currently enjoy a grey area of tolerance (van Gameren, Ruwet, and Bauler 2014).

Dominant agriculture and food policies do not support AFNs and the type of agriculture they tend to target. Policy creates the framework conditions within which producers operate and determines many of the decisions they can make. It also creates the framework that influences consumer decisions (Pothukuchi and Kaufman 2000). Existing policy still steers agriculture towards industrialization and globalization (Spaargaren, Oosterveer, and Loeber 2012b; Marsden and Sonnino 2012). Measures that do support

AFNs remain uncoordinated and their size and political support pales in comparison to measures promoting industrial agriculture and global market orientation. In order for sustainable consumption niches to grow, solutions need to be developed beyond offering consumption opportunities. This includes targeting “the social, legal and physical constraints that individuals face when they try to adopt new patterns of behaviour” since “sustainable consumption paths start from the social, symbolic and material contexts where consumers live” (Brunori, Rossi, and Guidi 2012, 5). This may have to be done through policy, as market mechanisms may not be capable of delivering the correct incentives for necessary developments.

The literature demonstrated a knowledge gap in understanding how AFNs can maintain their goals in growth to contribute to sustainable food systems. To close this knowledge gap, the following empirical work, documented in Chapter 3 was carried out.

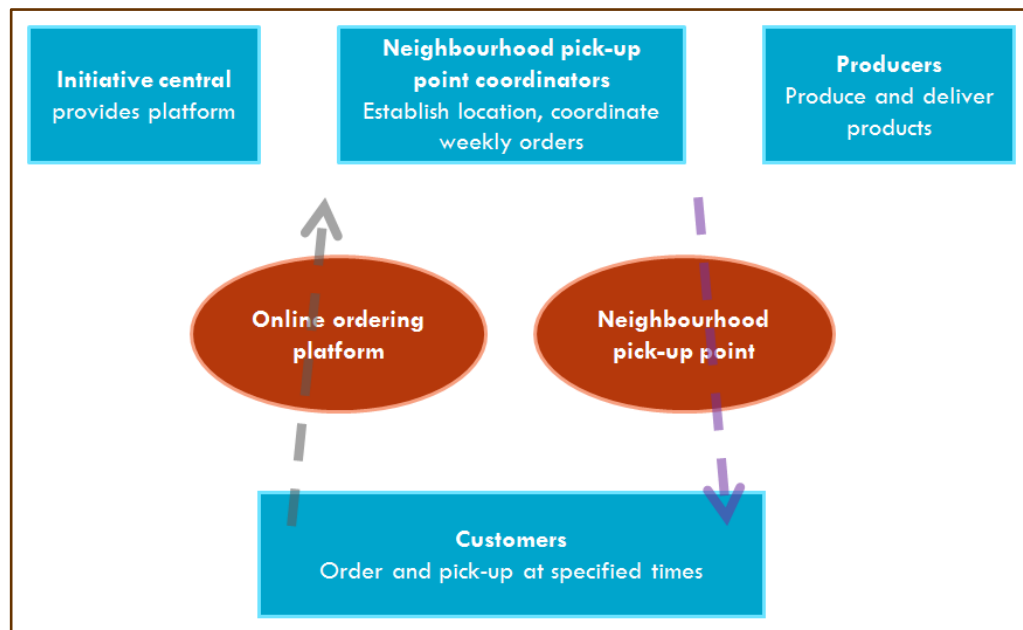
3 EMPIRICAL FINDINGS

This chapter details the empirical findings of the case study. Rechtstreeex and the Food Assembly (FA) are both a novel form of AFNs: the community pick-up point scheme (CPPS). Initiatives of these kind are a novel innovation and have not yet been described in literature.

The CPPS business model is based on a combination of bottom-up consumer or community-based entrepreneurial initiative and top-down structure and support. In the business model, expansion depends on interest emerging from the community, while the top-down structure provided by the initiative central allows for efficiency.

A CPPS functions as follows: As a first step, the initiative's central office advertises the general opportunity for setting up a pick-up point. An individual approaches the initiative central office and expresses desire to set up a pick-up point. New pick-up points are established when a neighbourhood coordinator is able to prove to the central office that they have the ability to successfully organise one, including organising the location and enough customers (PO). Once established, orders are placed individually by customers to a pick-up point without minimum order or subscription requirements via an online platform, and are picked up weekly at a designated location and time. Figure 4 illustrates the common structural characteristics shared by the two initiatives.

Figure 4 Basic CPPS common organisational structure



Source: own design

In Figure 4, the grey arrow represents ordering, and the purple arrow represents delivery. In each initiative, order processing and delivery follow different paths involving the three

groups of supply-side actors at different times. The two initiatives therefore differ slightly in how main activities and responsibilities are distributed. Figure 7 (Rechtsreex, in chapter 3.1) and Figure 11 (Food Assembly, in chapter 3.2) depict how each respective initiative is organised.

The CPPS is a social innovation because it redistributes the activities and benefits of the food value chain in a novel way. It removes most of the middle of the chain, and makes the connection between customer and producer much more direct. Contracts are eliminated, and the producer receives a significantly larger amount of the consumer price. This structure distributes power in the value chain more equally among all actors, whereas in conventional supply chains it is concentrated with retailers, distributors, and processors.

Environmental and social aspects play a role for both initiatives under study. Both emphasize the importance of affordability, sustainability, fairness, and community.

The following sections give an overview of each of the initiatives and investigate the relationship between the initiatives' business model and the four Dimensions of Empowerment.

3.1 RECHTSTREEX

3.1.1 Overview

Rechtstreex is a private for-profit company CPPS based in Rotterdam, the Netherlands, that focuses on bringing local foods as directly as possible to urban customers. The name is a play on the words "*rechtstreeks*" which means directly, and "*streek*" which means region or local area. Rechtstreex's business is built on four main channels, which they view as mutually reinforcing (PO):

- Community pick-up points: this is the central part of the business. Customers place orders online once a week with the "neighbourhood leader" ("*wijkchef*"), who bundles them into one order and sends it to Rechtstreex central. There is no requirement for ordering and no subscription. Rechtstreex central orders directly from the producers, who deliver to the Rechtstreex distribution centre, and once a week the products are taken to the community pick-up points. Individual customers then pick up their order from the pick-up point during designated pick-up hours. These are mostly in the evening right after the delivery, though some points also offer pick-ups in the morning on the following days. Each *wijkchef* purchases their weekly order from Rechtstreex central based on customers' orders, which is then bought from them by the individual customers. If a customer does not pick up the order, the neighbourhood coordinator

either carries the costs her- or himself, or sends the invoice to the customer despite products not being picked up (PO).

The Rechtstreex central office is responsible for sourcing products and negotiating and setting prices, as well as maintaining the online ordering platform, central communication, and support to wijkchefs (PO) Figure 7 below contains a diagram of the Rechtstreex pick-up point structure.

- Food service (“horeca”): Rechtstreex also delivers its products to food service businesses (in Dutch referred to as “horeca”, an abbreviation for *hotels/restaurants/cafes*). Most of these sales have arisen from food service businesses who contacted Rechtstreex requesting products and are handled on a case-by-case basis (PO). This includes a cold lunch catering targeted at offices.
- Fenix Food Factory shop: Rechtstreex also runs a shop in the Fenix Food Factory (FFF), a renovated industrial hall featuring six small high-quality food shops. The shop sells Rechtstreex products and also hot meals made with the products, and displays information material. This serves not only as a sales point, but also as an educational and information point where customers can experience the products aesthetically, see ways of cooking with them, and ask questions directly (PO).
- Events and workshops: these are to educate and inform consumers about the stories behind products and how to use them. Events often draw connections between Rechtstreex products and food system issues; for example, the problem of food waste is discussed in workshops on fermenting (PO).

Rechtstreex began in 2013 with one pick-up point in Rotterdam. Over 2014 and 2015 it expanded to seven pick-up points as well as the FFF shop, the lunch catering, food service, and events. Demand and sales are steadily growing; average pick-up points reach around 250 customers with their newsletter, and in a given week around 20-30 of these customers place orders (PO). Two more pick-up points open in March and April 2015 in Rotterdam (document RX-1, accessed 09.03.2015). Figure 6 contains a map of these nine

Figure 5 Seasonal soup cooking workshop

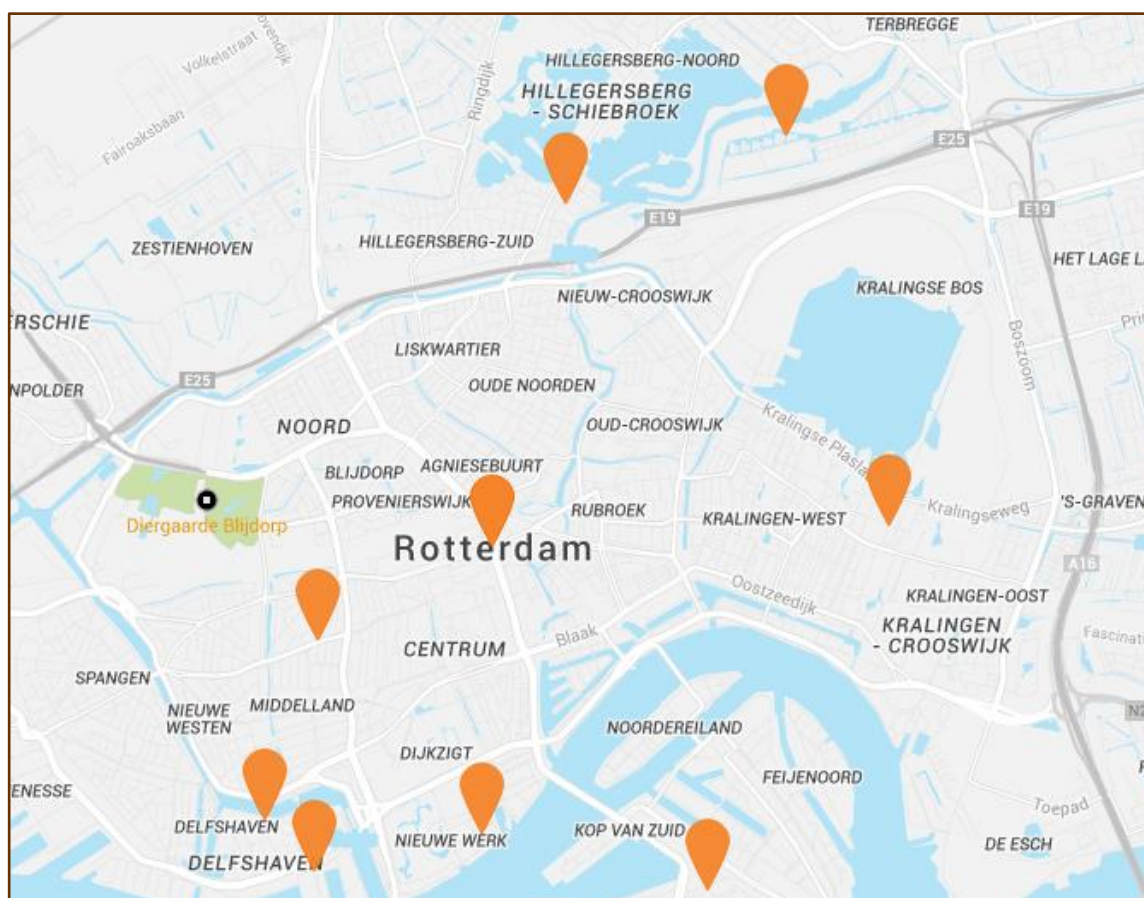


Source: Rechtstreex 2015

(document RX-3 24.01.2015, accessed 26.01.2015)

pick-up points. Later in 2015 several new pick-up points, as well as a Rechtstreex kitchen and more cooperation with gastronomy (PO) will be added. Currently Rechtstreex has concrete plans to expand within Rotterdam and to the neighbouring city Utrecht. Expansion in other cities is also part of long-term plans, but no concrete preparations have been made (“Koffietijd: Rechtstreex van de Boer” 2015). This analysis focuses on the community pick-up point side of the business and not on the other channels. The scale of analysis is the city of Rotterdam, as explained in section 1.1).

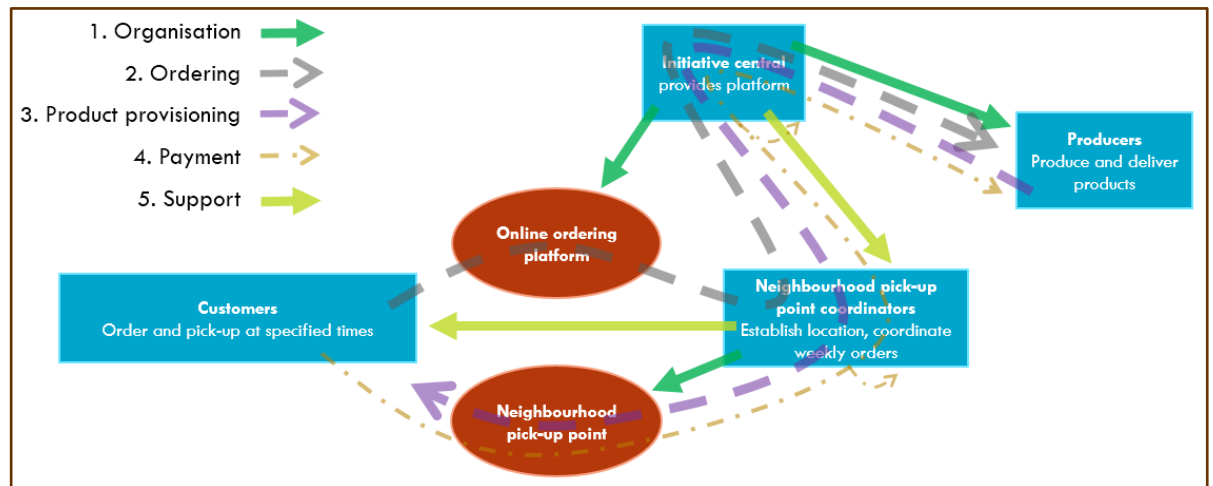
Figure 6 Rechtstreex pick-up points in Rotterdam



Source: Document RX-1, accessed 09.03.2015

is a diagram detailing the structure of the Rechtstreex community pick-up point supply chain. Dashed arrows represent commerce activities (ordering, product provisioning, and payment), and solid arrows represent service activities (organisation and support).

Figure 7 Rechtstreex Community Pick-Up Point structure



Source: own image

3.1.2 Rechtstreex's goals

Rechtstreex's primary goal is to provide high quality local food at a fair price for producers and consumers. It describes its ideals as follows:

"At Rechtstreex we believe in a food chain that is not harmful to anyone. Open and honest. That supports small local farmers and gives back freedom of choice to you"*
(Document RX-1 accessed 19.02.2015)

All of the products offered by Rechtstreex are described as local products. About 80% of the products are sourced from within 20 km of Rotterdam, and many are also certified regional products ("Wie, wat, war in de Fenix Food Factory" 2014, PO). Many of the products offered by Rechtstreex are organic or biodynamic, though some of the smaller producers are not certified (PO). Some producers who do not operate according to certification guidelines take efforts to reduce their environmental impact, but production decisions are ultimately made based on other quality measures such as taste (PO). Since Rechtstreex buys directly from producers and sells as directly as possible to consumers, they are able to offer significantly higher prices to producers than many producers obtain when selling to large distributors or supermarkets, which offset the higher logistical costs for producers of providing small volumes (interview 4, PO), while keeping consumer prices competitive with supermarkets and other specialty stores. Rechtstreex products are of high quality and relatively exclusive (i.e. not available to consumers from many other sources).

However, Rechtstreex does not operate using strict standards, e.g. about environmental performance or certification, maximum delivery distance, or health. Beyond the statement provided on its website, Rechtstreex does not communicate in more specific terms a vision or ideals for the company, the food system, or society.

The following sections investigate the role played by the four Dimensions of (Dis)empowerment in Rechtstreex. Rechtstreex sees its primary role as innovating food value chains. Though most respondents expressed a desire to change the food system, the concrete role of Rechtstreex was rarely specified. As a profit-driven company, Rechtstreex is not primarily focused on impact beyond their business at this stage in its development.

3.1.3 Resourcing

Resourcing is defined as:

“the process by which actors acquire the resources they need to attain their goals. Resources can refer to monetary resources, but also to natural resources, artefacts, information or ‘human resources’ (i.e. man hours).” (Søgaard Jørgensen et al. 2013, 34)

In Rechtstreex in Rotterdam, the most important resources are human resources and networks, physical resources and infrastructure, and financial resources.

3.1.3.1 Human resources and networks

In all interview and PO discussions on the topic of resources, human resources were cited as by far the most important for the young company. Respondents repeatedly referred to the difficulty of finding “good people” or “the right people” (interview 1, PO) to work for the company. Time, referring to human resource capacity was also cited as “our most important resource” (interview 1).

Managing human resources appears to be a challenge for Rechtstreex. There is a high turnover among staff (interview 5, PO). Staff and neighbourhood coordinators mentioned feeling overworked or having to work more hours than anticipated (interview 2, PO). The work burden on the neighbourhood coordinators was mentioned to be higher than originally communicated by staff (interview 2, PO). Some saw the issue of burnout as the primary human resource challenge (PO). Respondents noted that there are many projects within Rechtstreex and with which Rechtstreex actors are involved, and “trying to find the right balance” between projects was a central concern in the distribution of human resources (interview 1, 5). This also posed a potential challenge for branding and communication to the public (interview 5).

Networks are also very important for Rechtstreex. Networks such as the Youth Food Movement (YFM), neighbourhood initiatives, or freelancer networks as well as less formal connections among entrepreneurs in the food scene in Rotterdam are channels through which information and other resources travel (interview 1, 5, PO). Respondents cited formal or informal network connections as key for resourcing, e.g. finding staff, locations,

products, and customers (interview 1, 5, PO). In this way, involvement within networks and networking activities empower Rechtstreex by facilitating resourcing.

3.1.3.2 Physical resources

In terms of physical resources, physical spaces and locations used by Rechtstreex are mostly donated or available to the public for free, are spaces to which Rechtstreex actors have access through personal or other professional means, or they are acquired for discounted prices through e.g. negotiations with the municipality (interview 1, 2, 3, PO). This allows Rechtstreex to keep costs for physical resources very low; however it also requires a significant amount of flexibility and limits long-term planning, since they rely on non-traditional use agreements which may change or be revoked in the future (PO).

Table 1 Examples of locations and methods of acquisition

Location	Type of space/method of acquisition
Pick-up point Hillegersberg-Terbrugge	Garage of neighbourhood coordinator's home
Pick-up point Kralingen	Donated space in restaurant
Pick-up point Coolhaven	School in which neighbourhood coordinator works
Pick-up point Midelland	Donated space in co-working office
Pick-up point Delfshaven	Space in hotel owned by neighbourhood coordinator
Distribution centre	Donated by the municipality
Space for staff meetings	Café/open working space in Rotterdam Central Station

In addition to organising the location, all other physical resources at the pick-up points such as presentation and storage space (including refrigeration), payment infrastructure, and decoration are all the responsibility of the neighbourhood coordinator. They may be financed by the neighbourhood coordinator him- or herself, or by the actor providing him or her with the space (interview 2, 3, PO). Rechtstreex central provides the distribution centre storage and delivery, and producers are responsible for production and delivery of the products to the distribution centre (interview 2, 4, PO).

The responsibility of producers for delivering their orders to Rechtstreex was cited as a factor limiting the possibility for expansion by a producer respondent (interview 4). The small quantity and low frequency of orders means that producers are burdened with higher logistics costs. This is disempowering for producers, because it means that more of the financial and work burden is put on them in comparison to working with larger buyers. This may discourage some producers from participating. Currently the higher burden is made up for by the higher prices offered by Rechtstreex, but the respondent noted that

this would present a challenge in expanding this side of the business in the future (interview 4).

3.1.3.3 Financial resources

Financial resources come mostly from product sales, and some from food service and events. A grant from *Stichting Doen*, a foundation that supports green, social, and creative projects (Stichting Doen Website n.d.), supported the foundation of the company. However, staff described grants and subsidies as generally unattractive, since the application process usually requires a significant time investment and there are long waits for decisions, and the company develops too fast and staff have too little time to write applications for subsidies to be worthwhile (PO). Traditional financial institutions such as banks were described as “not interesting” (PO). Staff cited banks’ increased risk aversion, stricter loan requirements, and higher borrowing minimums brought on by the financial crisis as barriers preventing them from using the traditional financial system (PO).

The distribution of financial resources within the company is an aspect of resourcing in which both empowering and disempowering characteristics can be seen. Figure 7 depicts the cash flow from sales. Rechtstreex central sets prices with producers, then adds 15% to the price when selling the products to the neighbourhood coordinators. The neighbourhood coordinators add an additional 20%; the producer price plus 35% is therefore what customers pay. Income is therefore 15% and 20% of sales for Rechtstreex central and the neighbourhood coordinators, respectively, from which taxes (9% for food and 21% for alcohol in the Netherlands) are deducted (PO). The supply chain structure means that both reward and risk are shared by Rechtstreex central and the neighbourhood coordinators, which incentivizes all sides to ensure customer satisfaction with products and service.

Some doubts were raised by staff and neighbourhood coordinators about the adequacy or fairness of compensation for the amount of time worked (PO). This may be contributing to feelings of burnout or the perception of higher than anticipated work burden described above. Gender may also play a role, although not intentionally. The owners are both men, yet nearly all other staff positions are filled by women, and all of the neighbourhood coordinators are women. When explicitly asked about gender, respondents did not see this as playing a (dis)empowering role (interview 5, PO). One respondent said “I think the pick-up points and the women that are there are creating the value for Rechtstreex” (interview 5). Yet doubts raised about the fairness of compensation were raised only by female respondents and were mainly related to the community pick-up points.

3.1.4 Monitoring

Monitoring is “the process that actors use to evaluate the impact/progress of their initiative/network on/in the context of the surrounding societal systems” (Søgaard Jørgensen et al. 2013, 34). In Rechtstreex, most monitoring is done on an ad hoc basis, and concerns over flexibility are given precedence over rigorousness of standards in order to encourage growth.

Rechtstreex does not do any formal progress or impact monitoring. They measure growth in terms of sales and pick-up points, both of which are on the rise, but there is no process to monitor the effectiveness of growth or developmental paths. They have a general vision of how they would like to grow the business, but no concrete targets. There is a trial-and-error approach to expansion, and most monitoring is done “ad hoc” (interview 1, PO). Weekly management meetings and meetings between staff serve as the main way to assess progress and identify and address problems (PO). For the staff, monitoring was not seen as a current priority compared to daily business activities and business development (interview 1, PO). When asked about monitoring, one respondent answered “there’s just no time for that” (interview 1).

In visions, growth is usually expressed in terms of the size of the business, not in impact on societal systems. Respondents seemed to have a clear understanding about system and societal change generally, but when speaking about Rechtstreex’s role usually spoke in general terms and not concrete impacts, actions, or connections (interview 2, 5, PO).

Rechtstreex does not engage in formal impact assessments or monitoring. They do not have standards for the products they include in their assortment, but instead rely on ‘gut feeling’ when deciding which products to offer. One respondent described the following as the key factor in selection: “I see that twinkle,” meaning that she felt when interacting with the producer that “his heart is in his land or his food” and that he and his products are trustworthy (PO 21.01.2015). Trust based on personal interaction seems to be the main selection criteria. The size of producers, local origin, and environmentally friendly practices were all mentioned as being important, but there are no concrete or absolute standards. Rechtstreex also does not use indicators, models, certification, or other methods to assess the ecological, social, or societal impact of its business.

This is recognized as a challenge by actors within Rechtstreex, but there is no vision or consensus on if or how to improve monitoring. Staff recognized that targets or standards should be introduced, but felt that it would be too much of a limitation at the relatively early stage of the business (interview 1, PO). Respondents were sceptical of certification schemes. One respondent said that certification schemes lead people to “stop asking

questions” (PO 21.01.2015) and found the subjective selection process more transparent, trustworthy, and empowering. Confining themselves to certified products is seen as a step away from face-to-face relationships and towards the problems of industrial food systems (PO). Certification schemes are seen as too rigid and arbitrarily limiting. However, the lack of standards is also a recognized source of tensions, and respondents expressed the desire for some sort of standards for product selection, such as a stricter standard for locality, and clearer communication of standards (interview 3, PO).

3.1.5 Learning

Social learning is the “processes of learning (acquiring information, knowledge, experience), between individuals and groups at the level of the initiative/network, but also beyond the initiative/network to the broader social context” (Søgaard Jørgensen et al. 2013, 34). Learning in Rechtstreex can be separated into operationally relevant learning (i.e. learning about how to do business activities) and consumer education. The autonomy of actors within the Rechtstreex business model makes learning-by-doing the most common and relevant form of learning. Most learning processes also reflect the business model in that they feature both online and offline elements. Consumer education is primarily limited to Rechtstreex’s customer base, which empowers customers but also means impact is focused only on this small group of consumers.

Learning is very important for empowering behaviour change to achieve Rechtstreex’s goals and happens through many channels and among different actors. The business model’s combination of offline and online interaction is reflected in learning processes. The model is also well-designed to educate customers about products’ intangible qualities, which empowers customers and producers.

Respondents described experiential and social learning as the principle type of learning within Rechtstreex. This was identified as ‘learning by doing’ and ‘learning as you go’ by respondents (interview 1, 2, 3, 4, 5, PO). The business model, including the relative lack of hierarchy and high autonomy given to the neighbourhood coordinators and producers, seems to contribute to and shape the learning process (interview 1, PO). Impulses and information from all levels are gathered and shared informally through daily business routines and used to “improve the system” (referring to the technical system as well as organisation and business practices) (interview 1). One respondent expressed this as follows: “the only way for us to develop is bottom up. We’re really an enterprise that is into learning by doing.” (interview 1).

Figure 8 Opportunity for learning: face-to-face exchange and product samples at Rechtstreeex Midelland pick-up point



Source: Keighley McFarland

The neighbourhood coordinators described exchanges between each other and with staff, both formally through meetings as well as through informal contact, as extremely valuable for learning about topics relevant to being a neighbourhood coordinator (interview 3, PO). Exchanges happened in person as well as through a facebook group and email (PO). Some respondents hoped for more transparency and structure to create more opportunities for exchange to improve the learning process (interview 3, PO). This lack of structure can be disempowering, as it prevents more systematic exchanges that could be valuable learning processes to complement individual learning by doing.

The direct face-to-face and online interactions with customers that are an essential part of the pick-up point structure were also important for learning. Producers and neighbourhood coordinators cited the ability to get quick feedback from customers through the pick-up point direct marketing as essential for learning (interview 4, PO). Innovating to create interaction opportunities through technology was also important; for example, one producer began using What's App messenger service to get feedback from customers (interview 4).

Educating consumers is an essential part of Rechtstreeex's activities and the second type of learning observed in the initiative. There is a strong emphasis on knowing and sharing the stories behind products, as well as spreading knowledge about food, nutrition, agriculture, food provision and cooking, and the food system. This happens both in online

communication, via e.g. facebook and ordering newsletters (document Rechtstreex-3, Rechtstreex-5), but also in person at events and weekly pick-ups. Neighbourhood coordinators include information about new and existing products in online communication with members (e.g. announcing the inclusion of a new do-it-yourself liqueur kit and explaining the history of Dutch liqueur making [document RX-5, 31.01.2015]). Products are also presented for tasting at the pick-up points (PO). At the pick-up points, customers share information and experiences amongst themselves while waiting to pick up their orders, and neighbourhood coordinators share a great deal of information related to the products as well as the food system at the pick-ups (PO). The face-to-face contact creates the opportunity to ask questions about the products, Rechtstreex, and the food system. Both neighbourhood coordinators and customers found this an empowering facet of the Rechtstreex business model (interview 2, PO):

“[Customers] often ask me for advice, ‘what can I do with this vegetable,’ or ‘how can I prepare this dish,’ (...) Especially when I got veggies that are less well known, sometimes in my newsletter I give information on what you can do with it, sometimes I send a recipe with it. And also when people come to pick up their groceries, I inform them on how to prepare their vegetables, what they can do with it, how to bake it, or what are nice combinations. And that makes also that the customers themselves when they’re waiting are exchanging recipes and ideas. I think that’s very worthwhile because by doing so, people become more aware, and they get new ideas, and they start thinking more about what they are eating, how they are preparing their food, and what’s the quality of their food. And for me that’s important.” (interview 2)

Many of the products include detailed information on the packaging about the product’s story, the context, and how to use the product (see Figure 9). Rechtstreex workshops also exist to educate consumers about how to use Rechtstreex products, and explicit links are often made to food system issues (e.g. food waste and culinary traditions are topics in fermenting workshops) (document RX-1, PO).

Figure 9 Product packaging containing product information, history, recipes, and contact information to provide product feedback (at Rechtstreex Midelland pick-up point)



Source: Keighley McFarland

A knowledge- and learning-related concept that came up often in interviews was ‘stories’. One respondent stated “That’s [...] what Rechtstreex is. [...] Behind every product there’s a story.” (interview 5). Stories communicate intangible qualities of a product. The Rechtstreex business model is seen as an excellent, innovative way to communicate and create value for the story behind a product because of the direct, extensive contact with customers, transparent communication about products, and the attention given to product stories in Rechtstreex communication and branding (interview 4, 5, PO). This was seen by respondents as empowering for both the customer and the producer, since it gives producers the ability to create value based on a product’s intangible qualities and allows customers to better understand their food and make more informed choices (interview 1, 4, 5, PO). One respondent saw this as the most important contribution Rechtstreex could make to system innovation:

“Because people are aware of what they are consuming. This is because of the stories Rechtstreex sells them. They buy not only the food but also the story. It’s how they get expectations of food.” (interview 4).

This sentiment was reflected in other responses as well (PO). However, most customers who seek out Rechtstreex are already relatively knowledgeable about food and food issues and take it upon themselves to find and adjust to an alternative to standard food provisioning (PO). Therefore, although Rechtstreex encourages empowering learning

processes among customers, it may primarily reach customers who already know a significant amount about food and food systems and not those who have a low baseline understanding of food issues.

3.1.6 Governance

Governance refers to “processes of governing (regulating, decision-making, steering) by all types of actors (including but not confined to government)” (Søgaard Jørgensen et al. 2013, 34). Rechtstreex in Rotterdam is influenced by internal and external governance. The business model is characterised by a high degree of autonomy among all actors, which is empowering; yet external governance to a large degree limits growth and is disempowering.

3.1.6.1 Internal governance

Internal governance consists of dynamics between four main groups of actors in Rechtstreex: the **staff** at the Rechtstreex central office, the **neighbourhood coordinators**, the **producers**, and the **customers**. The structure of Rechtstreex is shown in Figure 7.

The primary responsibilities of the **staff** are distributed as follows:

- Two founders/owners: in charge of executive functions of the company and strategic decisions
- Communications team: in charge of press, communication, and marketing
- Regional coordinators: in charge of regional development and managing neighbourhood coordinators
- Buyer: in charge of developing the product assortment, managing suppliers, and financial model development
- Events coordinator: in charge of event planning

In addition, there are employees who work in the distribution centre managing product deliveries. Roles and responsibilities among the Rechtstreex staff are rather fluid; for instance, the Rotterdam regional coordinator, for instance, is also a neighbourhood coordinator and filled the events coordinator role for some time, and decisions about human resources are shared (PO). Most decisions relevant only within one area of responsibility are made directly by the responsible team member (interview 3, 5, PO). When there is conflict about a decision, or a lack of clarity about who is responsible, the issue is discussed at the weekly management meetings (PO). The partners have the final say on any decisions, but decision-making is described as very flexible, horizontal, and generally autonomous: “In the end the partners decide, but it’s very flexible, open to

anything. Yeah it's very horizontal. Like if there's a good idea, you can go and do it" (interview 1).

The **neighbourhood coordinators** act relatively autonomously within the structure set out for the pick-up points, and each neighbourhood coordinator is the person primarily responsible for his or her pick-up point. They have a great deal of flexibility in determining details of the pick-up points, such as hours of operation, appearance and set-up, and which of the Rechtstreex products they offer to their customers (interview 2, PO). With the autonomy also comes responsibility and risk; neighbourhood coordinators must themselves invest in physical infrastructure such as card payment systems and storage capacity, ensure access to the pick-up location, find and support customers, and ensure that orders are picked up. Neighbourhood coordinators meet about once a month with the staff to discuss relevant issues and exchange feedback. Outside of the neighbourhood pick-ups, the neighbourhood coordinators do not participate actively in decision-making or governance, though their feedback is seen as useful by the staff and is used to inform their decisions (interview 1, 3, PO).

Staff and producers described the transparency and quality-based model of Rechtstreex as empowering for **producers** (interview 1, 4, PO). Producers are responsible for developing, producing, and delivering products to the Rechtstreex distribution centre. Producers have more autonomy than with large buyers when making and fulfilling contracts with Rechtstreex. One producer said that he felt that working with Rechtstreex improved his power and position within the value chain by giving him more power to determine how the business runs and what prices should be, and how risk is distributed (interview 4). It also allowed producers the option of producing their products in the way they felt was best, since Rechtstreex offered a way for them to obtain more value for quality-related characteristics rather than quantity. For example, an apple producer for Rechtstreex preferred selling to Rechtstreex than to supermarkets, because supermarkets required him to put an anti-bruising coating on the apples that negatively affected the taste and Rechtstreex did not (PO).

Governance within the Rechtstreex business model is seen as empowering by most participants. One respondent said

"It empowers people to explore being an entrepreneur, because that's what they are when they are *wijkchef*. And also I think it can empower a lot of farmers to see that they can actually do it differently. Like if they're earning 50 cents per kilo instead of 2 cents per kilo, then their whole critique of the niche market saying like, well the volumes are too small, that could change because they're actually earning maybe 25 times as much in theory." (interview 1)

The Rechtstreex business model was also seen as empowering for **consumers**, but respondents disagreed on the impact. The transparency promoted by the Rechtstreex business model is seen as a way for consumers to regain autonomy in purchasing decisions, purchase foods that they truly want and support, and therefore participate more deliberately in the food system (PO). Yet respondents agreed that the primary interest of many Rechtstreex customers was the quality of the products, not changing the food system (interview 1, 2, PO). Recognition of this was also reflected in the communications strategy (interview 1, 5).

3.1.6.2 External governance

For Rechtstreex, external governance was generally perceived as unsupportive and disempowering. The regulations and policies that govern food systems and the market were perceived to favour large producers, global trade, and supermarkets (interview 1, PO). Especially in the Netherlands, agriculture markets and policies are focused on exports, and agricultural regulations set the frameworks under which producers operate (interview 4). Because of policy design, local markets are not prioritised, and the type and amount of production supported by policies could not be absorbed by local markets alone (interview 4). The general governance environment determining the structure of agriculture, which majorly impacts food systems, is not in line with the needs or goals of Rechtstreex.

As explored in the chapter on resourcing, traditional government subsidy programmes and financial institutions were also seen as not fit to support Rechtstreex (PO). When asked about supportive partners in policy or the city, no relationship was mentioned. The financial and regulatory environment were described as “old systems, old ways of thinking” (PO) not in tune with the needs of start-ups or fast moving innovative businesses. The regulatory and policy environment in which Rechtstreex operates is therefore largely disempowering.

3.2 FOOD ASSEMBLY

3.2.1 Overview

The Food Assembly (FA) is a private company CPPS focused on making local food available to (mostly urban) consumers directly from producers. They describe themselves as a “digital and participatory local food distribution network” (document FA-3). Food Assembly shares the basic CPPS structure with Rechtstreex (see Figure 4), but with one important difference: Food Assembly central and the neighbourhood coordinator are not involved in managing ordering or logistics, these tasks instead being completed directly by

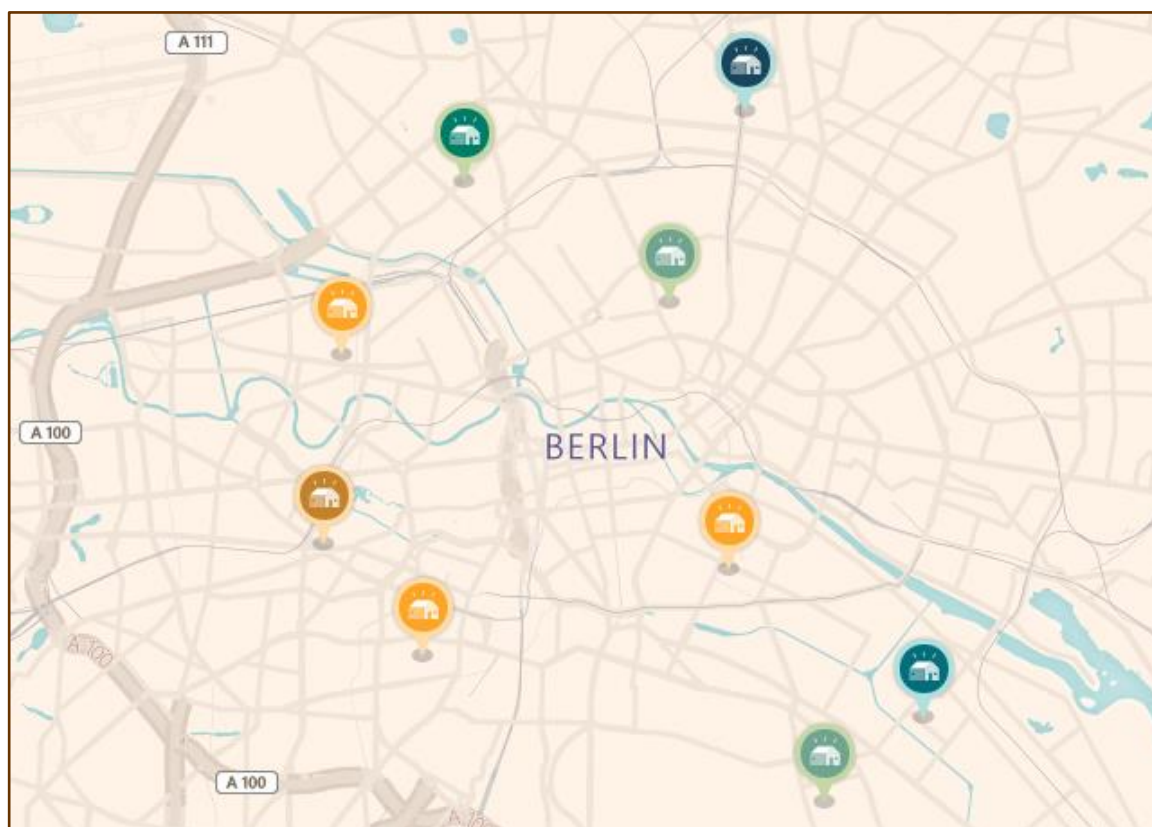
producers. Producers add their products directly to the online platform, consumers order online directly from the producer, and the producer delivers the orders him- or herself to the pick-up point, which is open for 2 hours once a week. Producers fix their own prices and set a minimum order volume, (i.e. the volume that needs to be ordered in a particular week to make the trip into the city worth it), and if the minimum is not met, they can choose to not deliver that week. As in Rechtstreex, each individual assembly⁵ is organized by a neighbourhood coordinator (called assembly leader or assembly host, in German *Gastgeber/Gastgeberin*), who plays a facilitative role finding the pick-up point location in their neighbourhood, recruiting local small-scale producers and members, and engaging the assembly community. The Food Assembly is a subsidiary of *La Ruche Qui Dit Oui*, which began in France in 2010 and has since expanded to Belgium, Germany, the UK, Spain, and Italy, with ambitions to expand to more countries (interview 7, 9). In February 2015, the Food Assembly headquarters and the national subsidiaries together had over 70 employees, over 700 assemblies, and over 60,000 members across Europe (document FA-3, interview 9, PO). Food Assembly describes itself as a “mostly feminine” network; as of April 2014, 80% of assembly leaders are women (document FA-3).

Food Assembly Germany began preparing its launch in Berlin in 2013, and the first pick-up point opened in 2014. The unit of analysis in this embedded study is Food Assembly at the level of the city of Berlin; reasons for this selection are explained in chapter 1.1. In Berlin the Food Assembly currently counts five active pick-up points, and several more in the planning stages are set to open this year (PO).

Figure 10 below shows the five active pick-up points in Berlin and four which are set to open in Spring 2015 on a map (one pick-up point in Kleinmachnow, an outer suburb of Berlin, is not pictured, as it is technically not located in Berlin but in the neighbouring state of Brandenburg). Berlin is the city in Germany with the most pick-up points. Food Assembly is also active in other cities, with active pick-up points in Cologne and pick-up points planned in several other cities and towns across the country. The Food Assembly central office is located in Berlin and manages developments in each city and expansion to new cities primarily from Berlin.

⁵ The word “assembly” refers to both the pick-up point as well as the group of individuals served by the pick-up point

Figure 10 Food Assembly community pick-up points in Berlin (excluding Kleinmachnow)

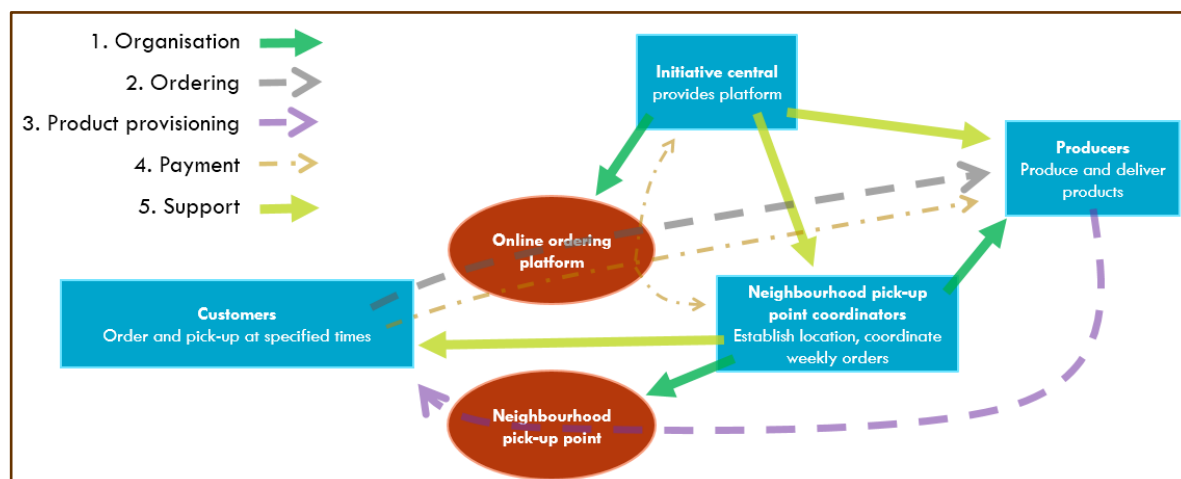


Source: document FA-2, accessed 09.03.2015

Currently Food Assembly's business only involves the pick-up points and not food service or other business channels. There are ambitions to expand in the future into further technological tools for small farmers, as well as education for small-scale agriculture and fair small-scale food value chains (interview 7, 9). Food assembly strongly emphasises the social aspect of their model – both in the sense of fostering social connections and community and in the sense of social fairness and solidarity (document FA-3).

The following diagram details the structure involved in the Food Assembly neighbourhood pick-up point supply chain. Dashed arrows represent commerce activities (ordering, product provisioning, and payment), and solid arrows represent service activities (organisation and support).

Figure 11 Food Assembly Community Pick-Up Point structure



Source: own image

3.2.2 Food Assembly's goals

The Food Assembly's main goal is to create an efficient and fair local food distribution service (document FA-3). It also seeks to foster social connections and community through this novel form of food provisioning and support small producers. It places emphasis on sustainable production, seasonality, traditional foods, quality, and respect. Food Assembly sees these values reflected in their business model (document FA-3).

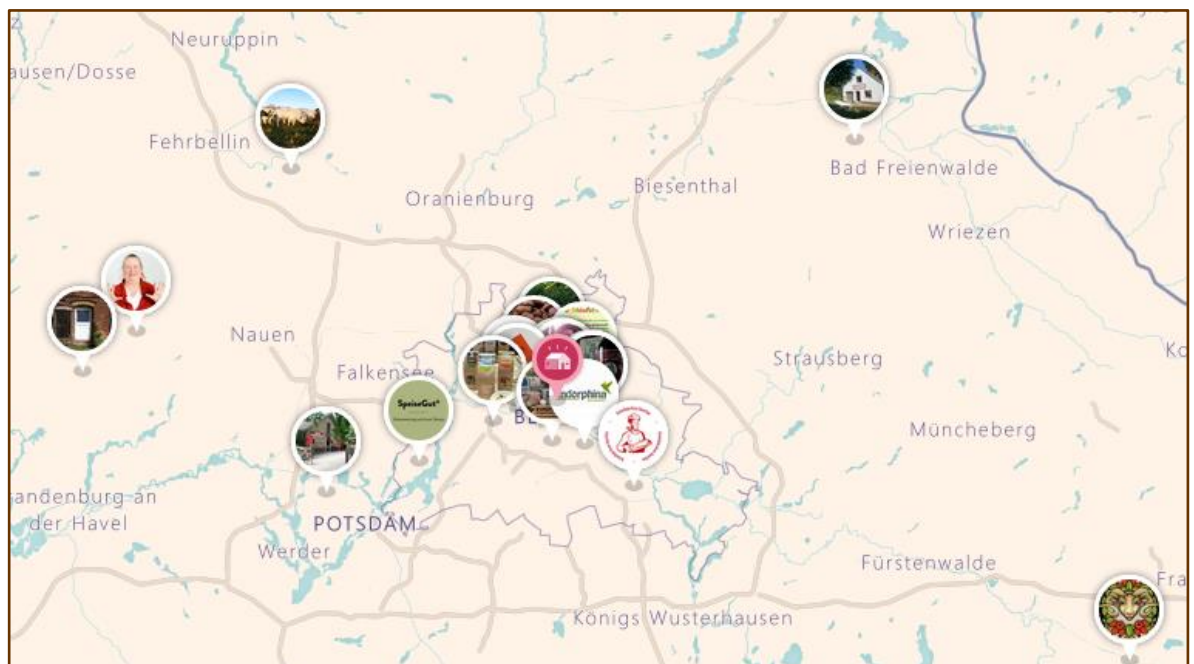
Food Assembly is currently developing a document through a participatory process laying down its goals and values. A workshop was held in January 2015 with producers and hosts to discuss what content and language the document should contain, and the document was drawn up by the Food Assembly German office. The following is based on a draft of this document from this meeting from March 2015 (document FA-9). The document names a few concrete criteria for products:

- Unprocessed products should come from within 150 km of the assembly, and products are not allowed to come from more than 250 km away and may only exceed the 150 km rule in "exceptional cases" such as no producers offering a certain product within the 150 km radius.
- Final processing of processed products must happen within the 150 km radius, and the component that are "decisive" in the product's makeup should be sourced from within the 150 km radius (there is however no limit to the amount or volume of ingredients to which this refers). The origin of the ingredients must be clearly traceable by the producer and should fit social, ecological, and fair standards (what these standards are is not specified).

- Products are produced “free of genetic technologies”*. Products may be organically certified or not. An earlier draft of the document also stated that products should be free of pesticides; however this wording was removed in later drafts, presumably since some producers produce with certified and non-certified integrated methods, in which small amounts of pesticides are accepted.

Not included in the document is the rule that products who’s “decisive” components are produced outside the 250 km exception radius are allowed to be sold once a month, if it is not possible to produce them within this radius (in the case of Berlin, this applies to products such as chocolate, coffee, or olive oil), they are directly sourced from the raw material producer, and the processor or final salesperson is located within the 250 km radius.

Figure 12 Section of map showing the producers who deliver to the Mitte ACUD pick-up point from the Food Assembly online platform



Source: document FA-2, accessed 4.3.2015

In addition to these concrete criteria, the document contains several more general statements about the initiative’s ideals:

- Producers produce “artisanally, seasonally, and sustainably, thereby respecting people, animals, and the environment”*
- Products are “high quality regional foods”*
- “Direct contact between producers and consumers supports transparency, trust, a sense of responsibility, and an understanding for quality.”*

- “Food assembly stands for the reconnection of food production and trade to the region and to understandable structures and economic cycles.”*
- “Food Assembly supports fair access to markets and the development of alternative production systems separate from globalised agricultural and food industries”*
- “Food assembly sees itself as an alternative model of economic trade committed to ecological and social goals”* (except the points listed above, these goals are not further elaborated)
- “Food Assembly sees itself as part of a social movement for sustainable diets and agriculture”*

Food Assembly targets small-scale producers. Those involved in Food Assembly see it as an important model for supporting small-scale farmers who feel inadequately supported or disadvantaged by agricultural or rural development policies (interview 7, 11, PO). The idea of “democratising”* farming was also mentioned by respondents as a goal of Food Assembly by developing technology and markets that support small-scale producers instead of only large-scale producers (interview 8, 9).

Food Assembly’s Values and Goals document was developed in a participatory process with producers and hosts lead by the office staff. This participatory process ensured that the needs, goals, and interests of all actors within Food Assembly could be integrated. This is in line with the autonomous, democratic governance style within Food Assembly; however, the participatory process may also contribute to a weakening of the goals in order not to alienate some actors. For example, an earlier draft of the Values and Goals document included that products should be produced without pesticides (document FA-11). This was removed from later versions.

3.2.3 Resourcing

In Food Assembly in Berlin, resourcing can be divided into human resources and networks, physical resources and infrastructure, and financial resources.

3.2.3.1 Human resources and networks

Networks were consistently cited as a key resource for Food Assembly. Networks that were seen as valuable had overlap with Food Assembly either in content or location and included a wide range: “Every subject on is on the table today. It’s about connecting with people reflecting on other issues, and seeing how we can become a network to implement change” (interview 7). Specific networks cited by respondents as important ranged from sustainable food, farming, and gardening networks (interview 8, 11) to generally sustainability-focused networks (interview 10) to neighbourhood groups (interview 10).

Networks serve as a source for acquiring diverse resources crucial for growth, including pick-up point spaces, information, staff, producers, customers, and hosts (interview 8, 9, PO). They also serve as the main channels for spreading news and information about Food Assembly to interested parties and “multipliers”, i.e. key individuals with valuable contacts, positions, or resources. For example, local organic farmer organisations were seen by one respondent as important partners in a mutually beneficial relationship, because they provide FA central with knowledge about many relevant topics, such as the agriculture in the region or legal advice, as well as contacts to producers (interview 8, 12): “For them it’s good because their producers can participate in Assemblies, and for us it’s good because we get their contacts and knowledge”* (interview 8). For these networks, connecting with and supporting Food Assembly is attractive because Food Assembly is seen as an idea that is useful for the growth of their own sector (interview 12).

One respondent pointed out that some people perceive similar initiatives such as CSAs and farm boxes as competition, but she disagreed with this perception, instead finding the proliferation and networking of initiatives empowering. She found that the initiatives complement each other, and together contribute to a movement by creating diverse options to pursue similar goals and targeting different types of consumers, thereby improving the conditions for all of the initiatives and contributing to larger-scale change (interview 8). This was also reflected by producers, some of whom diversified their sales channels to reach different types of consumers or to gain different types of benefits (e.g. risk minimization, social interaction, higher prices) (interview 11, PO).

Human resources and time were also seen as important resources, and the distribution of human resources and work burdens were generally perceived as fair and useful. Respondents connected this to the socially innovative character of Food Assembly; Food Assembly was seen as an enterprise that primarily deals with people and needs to have people who can respond to the needs of hosts, customers, the office, and producers for support, information, and engagement (interview 7, 8). The different groups of people involved in Food Assembly were all valued for their different abilities and types of knowledge; for example, more experienced hosts were highly valued as sources of information and experiences for newer hosts, producers were valued as sources of knowledge about products and agriculture (interview 8, 10). The autonomy given to each of the actors in Food Assembly was also seen as very empowering, allowing each individual to contribute to shaping the initiative (within the guidance and boundaries provided by the central). This is explored in chapter 3.2.6.

The structure of the business model, i.e. the high level of personal interaction with the customer and the high time burden on producers in logistics, limits the type of producers

who would want to participate; however, this limitation is a welcome and therefore empowering one, since it helps make participation attractive only to producers who can gain significant value from the more intensified and transparent interaction with Food Assembly's target consumers (interview 9). This means small specialty producers who's products have intangible qualities can achieve more value for them through the Food Assembly model.

Yet finding enough regional producers to participate is a challenge for Food Assembly in Berlin. Due to the structure of agriculture in the region surrounding Berlin, there are few producers that produce sustainable, high quality, diverse products; instead most agricultural land is used for industrial-scale production of commodity crops and biofuels (interview 12, PO). Competition among different regional food initiatives and organic supermarkets to source regional products is high (interview 12). Food Assembly currently has a solid base of producers offering a wide variety of products, but finding them was challenging: the first host and the office team drove around to different producers to present the idea and were met with extreme scepticism in the beginning. It took several tries to find and convince producers to participate (interview 6). The existing examples of success from France are helpful for convincing new producers to join or producers who are struggling to stay (interview 6, PO). Yet finding regional producers given the status quo and trend in agriculture around Berlin was seen as a limitation to growth (interview 12).

Though Food Assembly's customer base and producer network appear relatively mixed in terms of gender, the hosts are overwhelmingly female. The staff in Berlin is equally mixed, but the leadership positions in Berlin and internationally are primarily filled by men. Food Assembly was seen as an empowering opportunity for women by respondents: "We get women to develop a new kind of entrepreneurial project, since entrepreneurs are mostly men. It's a new form of entrepreneurship through the Assembly"* (interview 8). However, the income able to be generated as a host usually ranges around €10 per hour, which is close to the German minimum wage. Food Assembly communicates honestly and openly about the income a host can expect to receive for his or her efforts (document FA-3, PO).

Respondents found that the overwhelming proportion of women involved in Food Assembly did probably have an effect on the initiative. Because of the structure of the initiative and the autonomy given to the hosts in managing their pick-up point, the personality of the host was seen to determine the culture, feeling, and activities of the pick-up points, which contributed to its success. For example, one host in Berlin who is the mother of a large family was seen to manage her pick-up point in a "motherly"*, caring

way and put a lot of effort into creating a cozy and engaging atmosphere, which was different from the way that male hosts managed their pick-up points (interview 8, PO).

3.2.3.2 Physical resources

Finding a location was cited as the most difficult step of opening an assembly (interview 10, PO). Locations are subject to strict requirements: they must have parking available and be on the ground floor or have a lift so that products do not have to be carried up stairs or over long distances, they must have an indoor area (outdoor area is optional but seen positively), it must be available free of charge, and it must be a pleasant place to visit and spend time (PO). Yet the potential of pick-up points to bring attention to a location is often recognized by external actors who provide locations:

“It’s The local actors like town halls who allow us, because the project has a good aura, it appeals to people [...] who have an interest in doing it give us space. [...] People just don’t give the space for 2 hours to make money but they do it because it attracts a local community.” Interview 7

Locations in Berlin included arts centres, co-working spaces, bakeries, market halls, gardens, and cafes (PO). Some were obtained through personal connections, e.g. a host’s husband worked at the arts centre, or acquaintances from a sustainability network connected a host to contacts at an urban garden (interview 6, 10). Others were obtained because hosts worked in a space such as a café or office (PO). One example was obtained by engaging with a local Green politician who supported the idea and helped find a space to use (PO).

Though most saw the combination of the internet platform and direct face-to-face interaction as innovative and a very useful tool for connecting producers and consumers, one respondent mentioned that there is a scepticism about the internet especially among producers, and that digital communication infrastructure is very poor in rural areas in Germany (interview 6). The staff do try to support producers and help them use online tools, but their availability to do so is limited (interview 7). This could pose a barrier and be disempowering to producers with poor internet access or internet use skills.

3.2.3.3 Financial resources

Food Assembly Germany is currently supported financially by the Food Assembly headquarters in France, as it is still in its early developmental stages. Right now, more money is being invested in the Food Assembly Germany than it generates through sales (interview 7, 9). Some respondents expressed desire to look for local funding to support the growth of Food Assembly, but this was seen as a time-consuming process and given a low priority (interview 7, PO).

Food Assembly was described as “fed by farmers”; not only do producers provide food, but their sales are Food Assembly’s most important long-term source of income (interview 7). As shown in Figure 11, a portion of total sales through the pick-up points goes to the host and to Food Assembly central (8.35% each). This serves to compensate neighbourhood coordinators for their organizational and facilitative role and to compensate internet platform and business development as well as technical and commercial support provided by FA staff (document FA-3). Since most of the producers at Food Assembly are very small and rely mainly on weekly markets or other forms of direct marketing for sales, losing 16% of their asking price was seen as a significant sum (PO). Most Assembly producers do not sell to supermarkets, so the financial benefits of participating in Food Assembly are gained through having an additional channel to complement their other direct marketing channels (interview 12, PO), which does however not necessarily provide them with higher returns than other direct marketing channels. To overcome this, some producers raise their prices when selling through Food Assembly compared to other direct marketing channels (PO, interview 11). Raising prices also helps them account for the higher risk compared to e.g. CSA schemes or selling to food service because of fluctuating sales and limited experience of the performance of pick-up points upon which to base production decisions (interview 11, PO).

As with many AFNs, the model relies on the higher willingness to pay of consumers, which means that the customers more likely to participate tend to have higher income (PO). Some respondents expressed “fear that it would become an elite thing”* (interview 10, PO). Many respondents seemed to feel conflicted about the desire for producers to receive a fair and high price for their high-quality goods and the desire for the model to be accessible to all consumers (interview 6, 10, 11, PO). Respondents consistently expressed the conviction that the model empowered customers by allowing them to use their money to support fair, small-scale, local, and sustainable producers and direct exchange between producers and consumers; yet respondents also acknowledged that low-income consumers could be excluded because of high prices (interview 6, 10, PO).

Currently, sales are still relatively low, and not all producers are covering their costs through sales (PO). Growth at the different pick-up points is uneven; some are growing steadily, and some are stagnating or declining. Some producers expressed skepticism about staying with the model in the future, expressing dissatisfaction with the income they were able to earn (interview 6, PO). Others showed passion for the non-monetary benefits of participating in the model, but the question of income was still primary (PO). Despite the many social and other non-monetary benefits cited by respondents, one point was clear: “The most important thing for the producer is that he has to earn his money.”*

(interview 11). However, the staff and hosts assure producers that as the membership grows and a wider variety of producers join, sales will increase. About 10% of people registered as members actively buy in a given week, and registration is growing (PO). Producers were very strict about selling only through the platform and not under the table at assemblies, even finding trading amongst themselves to be unfair since it took income away from the host and FA central (interview 11, PO). This reflects that producers believe in the model and feel empowered by the activities of the host and office and by other aspects of participation outside of the financial benefits. Unwillingness to sell under the table also has to do with avoiding problems due to the unclear regulatory status of the pick-up points, which is further explored in chapter 3.2.6.

The pay received by hosts was perceived to be fair, but hosts also stressed that it was important to have conviction about the model and not participate just for the income (interview 6, 10, PO). Though the amount of work at the beginning of opening a pick-up point was very high in comparison to the amount of money that could be made, this was seen by hosts as an investment (interview 7, PO). The average income for a host in the early stages of a pick-up point is around 100€ per month. When the pick-up point reaches maturity, the average monthly income is about 400€ (interview 7).

3.2.4 Monitoring

In Food Assembly in Berlin, monitoring is done mostly on an ad hoc and informal basis. In addition to quantitative statistics, face-to-face interactions at meetings and pick-up points are important for monitoring. Food Assembly has some standards for selection of products and producers to ensure they only support producers in line with their goals.

Food Assembly has no official regular monitoring or evaluation process. The main metric that is measured to evaluate performance are number of pick-up points, number of members, and sales (interview 7, 8, 9, 10, PO). Some metrics have been measured on the national level in France, but have not yet been measured in Germany or other countries. These include whether producers sell exclusively through Food Assembly or also through other channels, which reflects that the model is more attractive than other direct or indirect marketing channels (interview 9). Testimonials and subjective measurements are also important in determining how pick-up points are performing and how hosts and producers feel about performance, but these are not collected on a systematic basis (PO).


The staff in the Food Assembly Germany office have aspirational yearly goals which are used to motivate and evaluate performance. For 2015, the goal is to have 60 pick-up points open in Germany by the end of 2015 (interview 8). Hosts and the office track sales, membership numbers, and producer participation to determine whether a pick-up point is

running well (growing or matured at a profitable level) or poorly (stagnating at an unprofitable level or declining) (PO). If pick-up points are not running well, the staff intervenes with advice, support, and motivation (PO). The goal is to empower hosts to find solutions to the problems themselves. There is also a weekly EU meeting with representatives from all countries to present progress and discuss problems on the national level (interview 9, PO). This increases accountability of the staff and provides a venue for them to make problems known and discuss solutions. This is empowering because it encourages staff to target problems and offers them support for finding solutions through exchange amongst different country groups.

Monitoring and evaluation are done mostly informally and ad hoc; for example, producers ask how customers found the products and ask for suggestions to improve them (PO). This feedback happens to some degree through the internet platform but mostly in person at the pick-up points (PO). The evaluation opportunities made possible by the face-to-face interaction at pick-up points are highly valued by producers (interview 11, PO). For example, one producer began offering cheese in smaller portions than he usually offers at countryside markets, because in Berlin there are more single households who prefer smaller quantities (PO).

In addition, some producers track their performance and development in sales sums and volumes (interview 11, PO). The Food Assembly model empowers producers by offering them a novel way to better understand consumers and tailor their products accordingly so they can improve sales.


Figure 13 Ordering through the Food Assembly online platform



HAVELLÄNDISCHE HOFKÄSEREI SEPP STEINBRECHER
Märkisch Luch, Brandenburg - 57 km

Die Käserei
Gegründet 2009, befindet sich die Käserei auf einem Biomilchhof im havelländischen Garlitz. Das Dorf ist 20 km nördlich der Stadt Brandenburg im Naturpark Westhavelland gelegen. Auf den hier typischen Luchwiesen weidet

[Weiterlesen](#)



FRISCHKÄSE-TALER KÜMMEL
HAVELLÄNDISCHE HOFKÄSEREI SEPP S...


Ein leckerer, Frischkäse-Taler, in der Weichkäseform hergestellt, gewendet und angereift. Am Tag der Verpackung mit aromatischem Kümmel großzügig bedeckt - ein sahnig-milder Genuss, pur in Häppchen oder auf Brot!

TYPISCHE HALTBARKEIT 5 Tage

[Schließen](#)

200 mL 3,50 €
▲ Nur noch 1 verfügbar 17,50 €/L

[Hinzufügen](#)



HAVELLÄNDER
HAVELLÄNDISCHE HOFKÄSEREI SEPP S...

Auch unser würzig-deftiger Havelländer ist aus Bio-Rohmilch gefertigt und wird täglich mind. 10 Wochen mit Salzwasser und Rotschmierebakterien gewischt,

[Weiterlesen](#)

3 Angebote Ab 5,10 €

[Auswählen](#)

Source: document FA-2, accessed 05.03.2015

Food Assembly does not have standards for their products and eschews the word “criteria”, but has established “goals and values” that apply to the producers and products, as explored in chapter 3.2.2. Many products are certified organic, biodynamic, or integrated production. Instead of setting a strict standard for products, Food Assembly uses the personal and transparent interactions to demonstrate environmentally-friendly production. Producers have pictures of their products or their production site and provide extensive information about production and production conditions on the platform and at

the pick-up points (document FA-2, PO). Though this increases transparency and trust among customers (PO), it does not provide consistent quantitative monitoring information about environmental impact. There are aspirations to do more systematic impact assessments in the future, but currently it is not a priority compared to growth and making the model financially sustainable (interview 7).

When asked about growth and monitoring, one respondent said that pick-up point size and culture should be monitored to make sure that they do not grow to become anonymous, and suggested implementing a membership cap (interview 11). Other respondents also expressed insecurity about the change in the culture or community that growth could bring to a pick-up point and how to track or control this (PO). However, they found the ability to see examples of large pick-up points (i.e. with several thousand members) from France over the internet platform empowering, because they provided examples of pick-up points that did preserve these essential qualities despite their large size (PO).

3.2.5 Learning

Actors in Food Assembly engage in both operationally relevant learning and consumer education. The primary form of operationally relevant learning in Food Assembly's decentralised model is learning-by-doing. Knowledge is shared through a combination of online and offline interactions, reflecting the general structure of the business model and is facilitated by staff. Educating consumers is also an important part of Food Assembly's work, but some producers felt conflicted about whether more effort should be put into educating consumers to understand their products or learning about customers' preferences and changing the products accordingly.

The most common type of learning cited by respondents was learning by doing (interview 7, 6, 8, 9, 10, PO). This is encouraged by Food Assembly's decentralized, autonomous model; exchange is promoted and there are contact people and channels available for support, but ultimately each producer and host is encouraged to make individual decisions (interview 10, PO). Learning from experience is seen as the most effective and relevant way to acquire knowledge. Those who are doing activities in a certain place are seen to be most fit to deal with them because of their context-specific knowledge, which may not necessarily be the best fit outside of that context: "When there is a problem, we try to empower hosts. He is the person on the ground, because he has all of the knowledge that one needs in that context. [...] Would somebody in Paris know what is going on in Cologne? Chances are, no."* (interview 9). Yet Food Assembly places emphasis on the fact that none of their producers or hosts are alone; support and information is made freely available to

those who request it as much as possible (document FA-10, interview 8, PO). However, not all respondents felt they always had the technical knowledge to answer all questions, nor the time to educate themselves (interview 8, PO). In the future, Food Assembly would like to offer some sort of educational programme for its producers, hosts, and staff; the details of this have not yet been established (interview 7, 8).

Information and knowledge is shared between and among hosts, the office, and producers through regular and semi-regular meetings, facebook groups, and informal face-to-face and telephone talks. The office has information material to support producers and hosts in the early stages, such as advertising material and tools for starting conversations (interview 10, PO). One respondent found this helpful but added that it was important not to rely too much on the office, and that it was important for the hosts to remain independent (interview 10). The exchange between hosts in person and through facebook groups was found to be extremely helpful for learning and problem solving and participants felt empowered by the ability to learn from the experiences of one another (interview 10, PO). The regular meetings were also seen as an empowering opportunity for both hosts and producers as well as staff. Through these meetings, staff were better able to learn about the needs of hosts and producers and take measures to support them. One respondent described this as follows: “The most important thing it to listen to your own network [...] The better you know it, the better you can work.”* (interview 9) The staff play an important role in collecting and distributing knowledge to and between hosts and producers (PO). Through the meetings hosts are also able to learn directly from each other. The combination of learning from peers on- and offline and having staff to support them empowered hosts and producers by providing them with multiple sources of relevant knowledge which they could use according to their affinities and needs.

Learning from existing success stories in Berlin or abroad is very important, especially for the producers. These are shared through the online platform, information material and word of mouth (document FA-2, document FA-10, PO). Especially in the early stages of a pick-up point when sales are low and most producers earn at or below their costs, being able to see that the model works elsewhere is an extremely important motivating factor (interview 11, PO). In addition, learning from and spreading the word of successes was seen as the main way Food Assembly can lead to changes in agriculture:

“When lots of Food Assemblies work and a producer can earn his money and also cover his costs of living from it, then he can convince others to start producing again or to do part of an existing farm for Food Assembly. But the will to do it has to be there from the producers. The will is only there when one has seen that it worked with others.”* (interview 11)

Testimonials are frequently used in online and print media to share experiential, qualitative information and communicate success stories (Document FA-2, FA-10); an example is pictured in Figure 14.

Figure 14 Brochure for producers including producer testimonials

EIN TOOL ZUR EINFACHEN FÖRDERUNG IHRER DIREKTVERKÄUFE!

- 1 EIN BENUTZERDEFINIERTER VERKEHRSBEREICH**
Auf der Online-Plattform sind Seiten eigens dazu gedacht, um Ihre Tätigkeit und Ihre Produkte mit Abbildungen und Beschreibungen darzustellen.
- 2 EINE VORTEILHAFT BEZAHLUNG**
Sie erstellen ganz allein Ihre Produktpreise und den Mindestbestellwert, der zu erreichen ist, um die Lieferung zu gewährleisten.
- 3 SEHR KURZE ZAHLUNGSFRISTEN**
Sie werden 10 bis 15 Tage nach jedem Verkauf bezahlt. Dies läuft alles automatisch und das Geld wird direkt auf Ihr Kundenkonto überwiesen.
- 4 NULL VERLUSTE**
Alles, was auf der Seite vorverkauft wird, wird auch geliefert. Am Ende der Zulieferungen gehen Sie mit Ihren leeren Kästen nach Hause.
- 5 EIN FLEXIBLER ABSATZMARKT**
Sie haben saisonbedingte Über- oder Unterbestände? Sie können Ihr Angebot von einem Verkauf zum anderen anpassen.
- 6 EINE TRANSPARENTE VERTEILUNG DES MEHRWERTS**
Sie erhalten 83,3% des Umsatzes vor Steuern. Die restlichen 16,7% ermöglichen es uns, die Assembly Leader, den Internet-Service, die Bankkosten und die technische und kommerzielle Unterstützung zu bezahlen.
- 7 EINE VEREINFACHTE BUCHHALTUNG**
Die Seite erstellt automatisch Rechnungen und Lieferscheine. Schluss mit den verschwundenen Stunden in der Buchhaltung.
- 8 ANALYSEINSTRUMENTE**
Statistiken, Übersichten... Die Seite stellt Ihnen Tools zur Verfügung, um die Erwartungen Ihrer Kunden besser zu verstehen und Ihre Produktion dementsprechend zu orientieren.

THOMAS BOONEN,
BIO-GEMÜSEBAUER,
FRANKREICH

„Ich bin keiner, der stundenlang am PC sitzt. Aber dank The Food Assembly habe ich begriffen, wie sehr das Internet die kurzen Verkaufswege antreiben kann. Alles geht viel schneller, die Information verbreitet sich in Windeseile, man erreicht jeden Tag neue Verbraucher. Und all das ohne dabei den Kontakt zu verlieren, denn dank der Zulieferungen trifft das Virtuelle auch das Reale.“

RICK VANDOOREN,
BAUERNBACKER,
FRANKREICH

„Ich beliefere meine Region mit Landbrot. The Food Assembly stellt mir einen neuen Absatzmarkt zur Verfügung und berücksichtigt dabei die kurzen Verkaufswege. Ich nehme kein Risiko auf mich, da ich mich nur fortbewege, wenn mein Mindestbestellwert erreicht wurde.“

PHILIPPE RENAUD,
MILCHERZEUGER,
FRANKREICH

„The Food Assembly ist ein wunderbares Kommunikationstool. Ich bin in 6 verschiedenen Assemblies tätig, die es mir ermöglichen, meinen Beruf zu erklären und meine Produkte zu vermarkten. Die vielen Verbraucher kennenzulernen öffnet mir viele Türen. Und das ist nur der Anfang...“

MIT THE FOOD ASSEMBLY SIND SIE NIE ALLEIN!

1 EINE MASSGESCHNEIDERTE BETREUUNG
Der Assembly Leader begleitet Sie Schritt für Schritt, um Ihr Angebot zu definieren und aufzuwerten.

2 EINE GEWÄHRLEISTETE KUNDSCHAFT
Der Assembly Leader kümmert sich darum, neue Mitglieder zu werben und zu binden. Einer Assembly beizutreten, bedeutet auch von der bereits existierenden und stets wachsenden Käufergemeinschaft zu profitieren.

3 EIN LOKALES SCHAUFENSTER
Eine Assembly ist stets in Aktion: Plakate, Flyer, Presseartikel ermöglichen es, das Konzept zu vermarkten und neue Assembly Mitglieder zu finden.

4 ZEIT, UM DIE MENSCHEN KENNENZULERNEN, DIE IHRE PRODUKTE LIEBEN
Mit den Vorausbezahlungen auf der Internetseite werden finanzielle Transaktionen am Liefertag verrechnet. Sie haben Zeit Ihre Kunden zu treffen und sich mit ihnen über Ihren Beruf, Ihre Produkte und Ihre Erwartungen auszutauschen.

CATHY MICHEL,
ZÜCHTERIN (FLEISCH),
BETRIEB AUS DEM CHAMPEAU
WALD, FRANKREICH

„Gleich zu Anfang meines Abenteuers mit den Assemblies habe ich mich mit zwei weiteren Erzeugern zusammengetan. So kann man die Logistik verbessern. Wir haben die Zulieferungen der Assemblies abwechselnd übernommen, damit wir mehr Assemblies beliefern und ein breiteres Angebot präsentieren können. Diese gegenseitige Hilfe und die Solidarität sind sehr kostbar. Man ist nicht mehr allein. Das ist sowohl beruhigend als auch erfreulich.“

ZULIEFERER EINER ASSEMBLY WERDEN

UM TEIL DES NETZWERKS EINER ASSEMBLY ZU WERDEN, MÜSSEN SIE FOLGENDE BEDINGUNGEN ERFÜLLEN.

- ✓ Landwirt, Züchter oder Erzeuger sein.
- ✓ Lokal produzieren in einem Lieferumkreis von max. 250 km Entfernung von der Assembly.
- ✓ Die Werte von The Food Assembly respektieren und die Qualitätsrichtlinien des Netzwerks unterschreiben.
- ✓ Produkte liefern und während der Zulieferungen anwesend sein.
- ✓ Auf Vertrauen und Transparenz gegenüber dem Leader und den Mitgliedern setzen.

DAS NETZWERK WURDE IM SEPTEMBER 2011 GEGRÜNDET UND UMFASST IN FRANKREICH BEREITS RUND 400 ASSEMBLIES UND MEHR ALS 2000 ERZEUGERN!

THE FOOD ASSEMBLY

Source: Keighley McFarland/document FA-10

Consumer education is a key element of Food Assembly's work and important to achieving its goals. Information about products (such as histories, ingredients, and recipe ideas) is shared with customers via the internet platform and face-to-face interactions between producers, hosts, and consumers at the pick-up points. Many producers offer samples of their products at the pick-ups or at Food Assembly events (PO). Some producers also provided information material and pictures at the pick-up points or packages along with products (PO). There were mixed opinions on whether the respondents found face to face or online and telephone information sharing more or less empowering or disempowering (interview 8, 10, PO). Producers found the face-to-face interactions at the pick-up points extremely valuable for sharing stories and information about the products with customers, and as a chance for them to receive feedback they can use from customers (PO).

Figure 15 Educating consumers: product samples and information material at a pick-up point



Source: Keighley McFarland

On- and offline exchanges empower customers by providing them with easily digestible information about products and their production, countering the overload of confusingly presented and quantitative information provided by traditional labelling with emotional, visual, qualitative, and experiential information. This gives customers the feeling that they understand where their food comes from, how it was produced, and what they are eating, and it makes it easier for the customers who want to use their consumer spending to support a certain type of agriculture to do so (PO).

Food Assembly was seen as a way to educate more people about food and food system issues in general (interview 6, 10, PO). Participation in Food Assembly was seen as a way to acquire new knowledge about the context and effects of food production and consumption:

“What I have learned is how much organic farmers are pressured by distributors in their prices. I think that’s a really important thing, valuing producers and farmers. The producer who puts in effort to produce a really nice piece. Which is not given any appropriate financial value in the normal market. That is just not right [...] The normal farmer is being broken by subsidies and by cheap imports. The true value of food and craftsmanship is being destroyed. It doesn’t reflect the true price.”* (interview 6)

“That’s the main thing, that a consciousness reemerges or redevelops among the people: where does my food come from, what kind of quality do I want it to have? So that people just think about this and consciously decide, and maybe develop a political opinion about it.”* (interview 10)

Figure 16 Exchanges at pick-up points in ACUD arts centre (Mitte) and Agora coworking space (Neukölln)



Sources: (above) Keighley McFarland, (below) document FA-6

This was perceived to be an important part in empowering consumers to make change in the food system. However, one respondent did note that “the idea does attract people who were always interested in it [food]”* (interview 6). When asked at a pick-up point if they bought food differently or thought about food differently because of Food Assembly, two respondents replied that they did try new types of foods at Food Assembly but had always placed value on food beforehand and still also bought some food at discount grocery stores because of the price (PO). It is difficult to say whether Food Assembly significantly increases education of consumers about food and the food system, or whether it primarily reaches already aware consumers.

Some producers felt conflicted about navigating the balance between educating consumers in the hopes of them developing a better understanding of product quality and adjusting their products to fit consumer’s desires (PO). For example, a pork producer offered large cuts of meat (2-5 kg), but these were rarely bought by urban consumers, and consumers frequently requested that he offer smaller cuts of meat. However, he felt reluctant to do so because the freezing process would destroy the quality of the meat if cut into small quantities before freezing (PO). To deal with this problem, he placed a guide to preparing larger cuts meat at his stand that people could read when they picked up their orders. He hoped sharing this knowledge would encourage people to buy larger cuts of meat; however, others expressed scepticism because the up-front price for larger cuts may have also been a factor deterring consumers from buying the product (PO). The limited willingness or ability of customers to learn about new products and ways of preparing them presents a barrier to the empowerment of farmers through the Food Assembly model.

3.2.6 Governance

As Food Assembly's business model is based on decentralisation and autonomy, so too is its internal governance. External governance, however, is to a large extent disempowering for Food Assembly in Berlin.

3.2.6.1 Internal governance

Internal governance in Food Assembly is decentralized and combines both top-down and bottom-up aspects. Most decisions are made on an individual basis according to individual needs and abilities. This applies to the office staff, hosts, producers, and customers. The office staff is composed of the president who is also in charge of accounting, a producer coordinator, a host coordinator, and a press and communications officer (PO). The staff see it as their duty to support the hosts, producers, and customers to develop their own pick-up points and businesses as entrepreneurs and autonomous individuals within the framework of the Food Assembly company (interview 7, 8, 9, PO). One respondent described the relationship between the office and hosts, producers, and customers as follows:

"Yeah. I think so [that Food Assembly empowers people]. By educating them, by giving them tools, by allowing them to be an entrepreneur but not entrepreneurs on their own, by being entrepreneurs in a network, by being entrepreneurs who are supported by a company like ours. Its allowing them to some have activities to make money on their own. Our whole business is based on empowerment, if you're not empowered, it doesn't work. We realize that we have to find a good balance between supporting and letting people make their own mistakes. Because when you support too much support you don't empower." Interview 7

Other respondents described the relationship as a "give and take"* (interview 11) where individuals are given support and guidance when needed but also "left a lot of free space"* (interview 10).

There is little official decision-making structure for most day-to-day decisions; decisions are made by those in whose area of competence the decision lies (interview 9, 10). Strategic decisions are usually made as follows:

- Pick-up point level: host
- Product, delivery, and production site level: producer
- Region or country level: Food Assembly Germany staff
- International level: international staff or leadership

In addition, customers independently decide which products to buy each week from the product palette. When problems or conflicts arise, the host is the first person who is responsible for attempting to solve the problem. If he or she is not able to, the staff intervenes. Most problems are able to be solved by the hosts alone or by the hosts and the

staff together. If the staff and the host together are unable to solve the problem and it is serious, it can be forwarded to the international coordinator or the international leadership, yet this is extremely rare (interview 9). This was described by one respondent as follows: “we try to do it as democratically as possible”* (interview 8). This empowers the people on the ground to find the most context-appropriate and efficient solution.

To keep an open channel between staff and hosts as well as staff and producers, regular or semi-regular meetings are held. The meetings among the hosts are referred to as meetings and happen monthly, and the meetings among the producers are referred to as “*Stammtisch*” (which translates to “regular’s table” in English and is used to describe a friendly or informal regular gathering) and happen every 4-6 weeks (PO). They are planned in the evenings to minimize the interruption of the producers’ and hosts’ work. This reflects the staff’s vision of themselves as a service and support team for the hosts and producers, as does the content and attitudes of the staff during these meetings. For example, at the first producers’ meeting, the producer coordinator informed the producers about relevant developments in the office and in regulation and asked for their feedback about them (PO). By listening to the producers, actively soliciting their input, and stating that their input would be taken into consideration, it gave the impression of giving legitimacy to their concerns and needs. One producer also confirmed that she felt that the staff “try to understand our problems and to change it.”* (interview 11). The supportive and guiding role of the office empowered hosts and producers to contribute to both the overall development of the initiative as well as the development of their own pick-up points and businesses.

There are guidelines (the “Values and Goals”) which were developed in a participatory process with producers and hosts according to which producers are supposed to operate. The participatory process increases the legitimacy and chances of acceptance of the document among the producers. It also gives them a chance to voice their opinions and concerns. This empowers them to integrate their desires and needs into the guiding vision for the initiative. Yet, as mentioned previously, the participatory process may have also contributed to a weakening of the goals in this case, prioritizing unity and inclusion over rigour and strictness.

When asked about governance, participation, decision-making, or empowerment, there was a common thread in most of the answers: Food Assembly was perceived to empower producers, consumers, and hosts by giving them the tools to have more control over their own income, work, production, and/or consumption decisions. This empowering aspect of the structure was described with such terms as “democratised”* and “freedom”*

(interview 8), “autark”* and “self-responsible”* (interview 10), “autonomous”* (interview 9, PO). The following is a selection of responses that reflect this belief:

Food Assembly is a “tool to give back power to the people who create value.”(interview 7)

“You can see that it works based on the fact that [in France] 20% of the producers work only with Food Assembly. This shows that it’s worth it and it’s better, even though there is more logistical work. Because farmers decide their own prices and are autonomous. They do what they want to do.”* (interview 9)

Consumers “get some of the ability to choose back. They can say ‘I am going to shop at the farmer’s, I am freeing myself from supermarket structures and am doing my own thing.’”* (interview 10).

“Every host shapes their pick-up point differently. I bring in my values.”* (interview 6)

However, one respondent from a partner organization of Food Assembly, an interest group for ecological agriculture, did not see how Food Assembly was empowering for consumers. His view was that Food Assembly represented “an interesting alternative to normal shopping”* but that it would only appeal to a niche group of consumers, because organic and alternative markets are still niche markets (interview 12). The entire organic sector still only makes up less than 5% of the total food sector despite recent rapid growth; there is therefore growth potential but the amount of consumers that it can reach will remain limited (interview 12).

3.2.6.2 External governance

Most respondents felt that the external governance to which they were subject was disempowering and limiting. Legislation and regulation was found to be significantly disempowering and was described as a “barrier at every level” (interview 7). The political framework which applies to food and agriculture is perceived by Food Assembly actors to prejudice large producers and global trade, leaving small-sale producers and producers and initiatives interested in local trade at a disadvantage (interview 7, 8, 9, 11). Policy and politics were perceived as “working against what we want to achieve”* (interview 8). Policy was also seen to be a contributing factor to the high prices the producers charged, since Food Assembly producers did not profit from subsidies the way that large, world-market-oriented producers do. This discourages low-income groups from participating in Food Assembly (interview 10). In these ways, the policy and regulatory environment is disempowering.

A manifestation of this is the regulation of the pick-up points. Pick-up points fall into a regulatory grey zone. The pick-up points are not considered markets or stores because there is no money exchanged at the pick-up points, but instead goods are picked up. For example, one producer was told by the regulator in his district that sales through Food

Assembly count as farm-direct sales and subject to the same regulations as the goods he sells at the shop on his farm (PO). In Berlin and the surrounding state of Brandenburg, each district has its own separate regulatory authority, which each implements regulations such as animal welfare and consumer protection laws differently (PO). Because most pick-up points are located in different jurisdictions from the production sites, and because the format does not fit clearly into an existing regulatory category, it is unclear to all involved which regulators are responsible for them (PO). Producers worried that the information and advice given to them by the regulator in their district may be different from the way the regulation is implemented in the district where the pick-up point is located, meaning that they could get in trouble with one regulatory authority for following the advice of the other regulatory authority (PO). Based on their size and what kind of products they produce, producers may be subject to or exempt from certain regulations, which may increase or decrease the burden on them (PO). For example, a biodynamic meat producer is required to send in samples of all of his meat to a testing facility because he produces in a non-industrial facility, which regulators see as riskier to consumer and animal health (PO). This leads to insecurity and disagreement about how to interact with regulators, and insecurity about how regulators will treat them or what to expect from them (PO). Producers were clear that they truly want to do things correctly and that they believe in the goals of consumer protection regulations and agree that they are there for good reason, but that the regulatory regime was simply unfit to deal effectively with this type of innovation (interview 9, 11, PO). In this way, regulation allows little room for innovation, especially by small-scale producers. The existing food and agricultural regulatory regime therefore presents a burden and a barrier and acts to disempower the Food Assembly.

4 DISCUSSION: HOW DO THE DIMENSIONS OF EMPOWERMENT CONTRIBUTE TO MAINTAINING OR SACRIFICING GOALS IN GROWTH?

The following chapter delves into the implications of the empirical findings for the research question. Similarities and differences between the two initiatives' goals are first presented to explain the connection between the CPPS business model and goals. Building upon this, similarities and differences in the dimensions of empowerment in the two initiatives are explored, and the consequences of these similarities and differences for the initiative's ability to maintain their goals in growth are analysed.

Beyond discussing the result's implications for the research question, the end of this chapter turns attention to the research methodology. The usefulness of the heuristic is reflected upon, and suggestions are given for further development based on research results.

4.1 GOALS

Though both initiatives shared the CPPS business model and there is overlap between their goals, their goals were not identical. The unifying factor in the initiatives' goals is that they both intend to establish *short, fair value chains for local products that are as direct as possible*. Yet beyond this each initiative's goals also contain nuances that differentiate them from one another.

Rechtstreex is more focused on creating a fair value chain for high-quality, high-end local products. Its goals include less of an emphasis on and a less clear relationship to system innovation and societal transformation than those of Food Assembly. Rechtstreex also has a less clear relation to environmental impact and criteria. They are more permissive of conventional agricultural practices than Food Assembly. Rechtstreex has a more radical understanding of 'local' than Food Assembly; this is mainly due to the different structural and infrastructural differences between the Berlin area and the Rotterdam area. The Netherlands is much more densely settled than the area of Germany surrounding Berlin. Whereas in Berlin a product from within 100 km would be considered local, in the Netherlands this may not be considered local at all.

Food Assembly is focused on creating fair local value chains for small, sustainable producers. Food Assembly has a more concrete definition of its criteria and goals than Rechtstreex, including a more explicit vision of Food Assembly's role in change beyond social innovation. Whereas in Rechtstreex, the products take centre stage, in Food

Assembly the producers receive more attention. This value is reflected in the pick-up point structures; in Food Assembly, the producers are significantly more visible than in Rechtstreex. Though the quality of the products is very high in both, quality did not receive as much emphasis in communication of goals in Food Assembly as it did in Rechtstreex. This may be because Food Assembly places a higher priority on avoiding being labelled as 'exclusive' than Rechtstreex does, or that emphasizing high quality has different connotations in the Berlin context (PO).

Food Assembly has the added advantage of being older and being part of a much larger company than Rechtstreex. This may have an effect on goal setting, as Food Assembly Berlin can see examples of success from other countries and find empowerment in the size and strength of the company as a whole. Being part of this larger company and being able to profit from its successes (especially in terms of resourcing and learning) may be a reason why Food Assembly has goals that relate to more Shades of Change than Rechtstreex. The activities of Rechtstreex in Rotterdam are concentrated more on day-to-day business issues than long-term goals, as it is younger and part of a smaller company; this practical, shorter-term focus may also contribute to the narrower focus in its goals.

This comparison demonstrates that basic goals of promoting a direct, fair value chains seem to be embedded in the CPPS business model, but that the goals may indeed diverge due to contextual and organisational factors. However, what the goals of an individual CPPS initiative are does not determine whether the business model is effective in maintaining them in growth; rather this is determined by the dimensions of empowerment. The following subchapters explore this further.

4.2 RESOURCING

4.2.1 Similarities

Several characteristics of resourcing within the CPPS business model that contribute to the maintenance of goals in growth were observed in both cases. These include the importance and use of networks, innovative distribution of responsibilities and benefits, and the effects of the centrality of non-financial benefits. Yet the model also displays some disempowering aspects that work against achieving its goals as it grows.

As growth in the CPPS model depends on interest emerging from the community, networks are of crucial importance for the business model's success and ability to achieve its goals. In both cases, formal and informal networks were essential channels for all kinds of resourcing, including infrastructure, human resources, and new customers. The recognition of the value of networks and investments in growing them help the initiatives

to achieve their goals, as it is most importantly through networks that they are able to obtain the means to grow.

In the CPPS model, the novel distribution of responsibilities and benefits among all supply-side actors gives all actors a stake in a pick-up point's success. This means that all are encouraged and empowered to ensure that goals are adhered to and achieved, as a failure to achieve goals has negative consequences for all involved, and all benefit from growth. The model itself reflects the CPPS initiative's goals of fairness, as it strives to create a more just division of work and compensation thereof.

The CPPS business model also encourages innovative non-traditional resourcing for physical and financial resources. This is a result of the distribution of income and responsibilities in the business model. The relatively low income means that non-traditional resourcing, e.g. provision of free space for pick-up points in exchange for the increased publicity in the neighbourhood gained by the new use of space, is more attractive, as costs must be kept at a bare minimum to make the activity worthwhile. Resourcing in both initiatives also made little use of traditional financial institutions and subsidies, because these were seen to be incompatible with the innovative business model (explored further in chapter 4.5). This has the benefit of strengthening local social ties and promoting local value creation in novel ways, which support the initiatives' goals. This form of resourcing therefore is evidence that the CPPS initiative's goals are embedded into the business model, which can prevent sacrificing goals in growth. However, non-traditional use agreements also mean that there is little protection for the initiatives as users, since they rely on mechanisms and agreements that are often short term or do not fall under traditional legal protections. The initiatives are also limited to sources of resources who are willing to be flexible and enter into non-traditional agreements. This incorporates an element of insecurity into the model, which is disempowering. Because of the associated insecurity and limited alternatives for non-traditional resourcing, the reliance on non-traditional resourcing could hinder the achievement of goals as the initiatives grow.

As the financial resources earned from the CPPS model are not very substantial, the CPPS business model depends on finding human resources and actors who are driven by intrinsic motivations beyond money. Emphasis is placed on benefits for participants in terms of non-financial resources such as social connections and contributing to a greater good. Participants therefore need to identify with the goals of the initiative in order to be motivated to participate, as the financial resources alone are typically not enough to motivate actors to participate. Goals are therefore embedded into the business model and

essential for its survival. In this way, the business model's resourcing structure encourages adherence to goals during growth.

The role of gender in the CPPS initiatives should be observed critically. The percentage of women increases as position in the hierarchy of each initiative decreases. Hosts, who typically earn the least from their activities, are overwhelmingly female. There may be many factors that contribute to this imbalance. Neither initiative specifically targets women, and respondents in both initiatives did not see the imbalance as intentional. Gender imbalance is a phenomenon observed in many AFNs, often linked by scholars to the persistence of women's traditional role as food provisioners in households (see chapter 2.3.2.3). It may also have to do with the lack of alternative attractive opportunities for women in the workplace. Though the model empowers women in non-financial ways, the fact remains that most of the women who participate in the initiatives do not earn a high income from their activities, and positions at the top of hierarchies are filled mostly by men. The gender imbalance works against achieving initiatives' goals of fairness.

Furthermore, the cost of the products limits the types of consumers that can be reached by CPPS initiatives. Products sold through CPPS are more expensive than from many other sources (PO). This excludes consumers with low income or who are not willing to spend a large amount on food. Though CPPS are growing quickly, as is the entire sustainable food sector, it is still on the whole a small niche, which is largely because of higher prices. This limits the ability of the CPPS business model to achieve its goals related to system innovation and social change, as its ability to grow is limited to a niche group of consumers.

4.2.2 Differences

Some differences were observed between the two initiatives which demonstrated that features of the different application of the business model can influence how well it is suited to maintain an initiative's goals in growth.

The initiatives distributed responsibilities and pay differently across different actors. In Rechtstreex in Rotterdam, a higher portion of the sales value went to the neighbourhood coordinators and to Rechtstreex central, but they were also responsible for significantly more of the logistics than in Food Assembly in Berlin. In Berlin, the producers kept more of the sales value, but also were responsible for nearly all of the logistics. In addition, logistics in Rotterdam were more streamlined, as deliveries were collected in a central distribution centre, whereas in Berlin the producers did logistics individually for each pick-up point. This difference in distribution of responsibilities and benefits reflects differences in the goals of the initiatives. However, in Rotterdam, concerns were raised by the hosts and staff about burnout and inadequate pay compared to the amount of labour

and time required. These concerns were not raised in Berlin. This may reflect that the distribution of costs and resources in Rotterdam is less effective than in Berlin; however, it could also reflect more appropriate communication and expectation management in Berlin. Berlin was able to use the experiences from other countries to establish realistic expectations of earnings and time consumption for hosts and producers, whereas in Rotterdam this experience was not available. It could also be due to the fact that in Berlin a higher burden is placed on the producers, and food producers typically have lower incomes than the career paths of many of the hosts (e.g. consultant, educator, nutritionist, accountant, editor, human resources officer). Because of this, obtaining a low income from time invested in Food Assembly might be more comparable to likely alternative time investments for producers than it would be for neighbourhood coordinators. Though Food Assembly's approach currently seems more effective, this may change in the future if Rotterdam changes its communication strategy. It is therefore difficult to say whether this aspect will have an effect on the initiatives' abilities to reach their goals in the future.

Furthermore, in Germany the lack of modern internet and communications infrastructure was found to be a barrier, especially for producers based in rural areas. In the Netherlands, communication infrastructure is much more advanced, and willingness to innovate and use ICT in novel ways seemed higher. The CPPS reliance on the internet means that in areas without modern internet infrastructure, the model cannot function effectively.

4.3 MONITORING

4.3.1 Similarities

Both initiatives move away from certification as a monitoring or evaluation tool. Respondents from both initiatives expressed distrust in certification and did not see it as a necessary element of their business model. Instead, the transparency inherent in the business model was seen to replace the need for certification to some degree. Since this transparency is based on stories and personal contact, the CPPS model limits the type of producers who would be interested in participating. Producers would only stand to benefit from the model if

- their products' intangible qualities are valuable enough to consumers to make up for the larger investment in logistics and communication, and/or
- they place value on being able to know and communicate with their customers.

As certifications are no longer the norm, the business model at the least encourages and at the most requires obtaining detailed information about production conditions of

individual producers. This innovative way of obtaining transparency inherent to the model is a mechanism to ensure that products' contribute to meeting the initiative's goals.

4.3.2 Differences

The ways goals and criteria are presented and communicated differed between the two initiatives. The effect demonstrated the importance of clear communication and monitoring of goals for achieving them within this business model. Food Assembly used a participatory process to develop a document detailing its goals. This document is a tool for hosts to guide their selection of producers and for producers to guide their production decisions. It is also a communication tool to inform customers and the public about Food Assembly's goals. In this way, this tool enables Food Assembly to set standards by which any actor within Food Assembly can monitor the maintenance of Food Assembly's goals. Because of Food Assembly's decentralised structure, all actors have a great deal of autonomy in making decisions relevant to their participation in the initiative; having this tool makes these decisions easier. Because of the high degree of autonomy given to actors in the CPPS business model, it is important that boundaries for their actions are set to make sure that they remain in line with Food Assembly's goals; this document does just that. Such a document could also help avoid conflicts in the future by setting appropriate expectations and limits.

Rechtstreex, on the other hand, has no such document. Instead, monitoring is done based on subjective feeling, and there are no concrete standards. Any communication about goals is only in abstract terms. This has the advantage that it allows flexibility in growth and accounts for qualitative factors that standards or criteria cannot capture; however, there is no mechanism by which decisions can be evaluated for their conformity with Rechtstreex's goals. Compared to Food Assembly, which has published information about its goals and how it seeks to achieve them, this approach provides less direction and does not set boundaries centrally, meaning there is no mechanism to manage expectations, communicate limitations, or collectively set goals. This lack of clarity has a higher potential to lead to conflict in the future. If goals are not clearly established among all actors, it is difficult to ensure that they are achieved, since individual interpretation of vague goals may be different or conflicting. There is already evidence of conflicts over goals in Rechtstreex, e.g. about how far away are ingredients of processed products allowed to be sourced. In Food Assembly, these sort of conflicts also arose, and establishing the Values and Goals document through a participatory process has helped to minimize conflicts that could not inherently be minimized through the autonomy inherent to the CPPS business structure.

4.4 LEARNING

4.4.1 Similarities

Two types of learning processes belong to the CPPS business model: operationally relevant learning and consumer education. Learning by doing and social learning are the two most important types of learning for business operations. Learning by doing was the most directly cited by respondents in both initiatives. Each producer and host is encouraged and empowered to learn in a way that helps them understand and meet their own needs, rather than centralising knowledge. The staff's primary role is to support other actors to find the best solutions on their own. Social learning through mostly informal structures and exchanges was commonly observed in the CPPS model, and exchanges were encouraged both on- and offline. Reliance on these types of learning empowers actors within the CPPS initiatives to contribute to the initiative's goals by supporting independent, context-relevant learning while providing central guidance. Thus top-down support complements primarily bottom-up learning processes. In this way, learning supports the accrual of knowledge among all actors, which ensures that all actors can make informed decisions to contribute to achieving the initiative's goals.

Educating consumers is the other learning-related process in the CPPS model. The model is very well adapted to sharing easily digestible information about products and producer with customers. Information is shared through visuals and stories, often with emotional appeals, and customers have many opportunities to ask questions about products or find information online and in face-to-face interactions. In offline interactions, both information material and personal conversations played a role. Not only are these opportunities used to learn about products or producers; they are also venues to learn about food and the food system in general. Information is therefore shared in a format that customers can easily understand and trust. Consumer education mechanisms in the CPPS business model can be used to educate consumers about whatever issues or information the initiative finds relevant. This gives interested customers usable, trustworthy knowledge to make well-informed decisions and deliberately support certain types of food production and food systems with their spending. The consumer education that is a part of the CPPS model helps to build an informed customer base. It therefore supports the maintenance of initiatives' goals in growth.

However, the consumer education that can be achieved through the CPPS business model is limited. The only consumers who are reached by education efforts are customers of the initiatives. In both cases studies, these tended to be people who are already quite aware of food issues. Because of the effort required to adjust to the new system, it self-selects for

customers who have a higher than average interest in or knowledge about products, food and food system issues. Therefore, the CPPS model's impact on consumer education may be limited to deepening the education of those consumers who are already relatively well-informed. This aspect of the business model therefore may not goals relating to system innovation or societal transformation in growth, since growth occurs primarily by attracting more of the same type of consumer, rather than expanding the types of consumers that can be reached. Consumers who are not willing to or interested in putting in the initiative to seek out alternatives to traditional food provisioning cannot be reached. The CPPS business model's ability to empower consumers is therefore limited. The exception to this is the potential to reach other consumers through social networks and connections. In both initiatives, I observed that individual participants influence other consumers among their friends and family by sharing products with them or convincing them to try out the initiative.

4.4.2 Differences

In Food Assembly in Berlin, there was a clearer structure to support learning than in Rechtstreeks in Rotterdam. There were more regular meetings and more regular interactions between staff, hosts, and producers. This seemed to make learning and problem solving easier, since it gave impulses to the staff to understand and fix problems, but also empowered hosts and producers to solve problems themselves by creating a space to answer questions and develop solutions together. In Rotterdam, on the other hand, respondents expressed a desire for more structure and felt that the lack of structure may have been limiting learning in a disempowering way. In Food Assembly, learning-by-doing is complemented with more social learning, and this seems to be a more effective learning strategy.

4.5 GOVERNANCE

4.5.1 Similarities

The most striking internal governance aspect of the CPPS model is the high degree of autonomy afforded to all actors. The CPPS was seen by participants as a network of entrepreneurs united under the business model. The staff and office support individual entrepreneurship under the umbrella of the initiative. Empowerment is a conscious and central part of internal governance in the CPPS business model. Actors are expected to be independent, and they gain benefits primarily as a result of their own initiative. Decision-making in both models was decentralised, with the central office playing primarily a supporting role. Interference in decisions was primarily limited to situations of conflict

and company-level strategic decisions. Internal governance structure in the CPPS model supports adherence to goals while growing. Although neighbourhood coordinators, producers, and customers all exercise a great deal of authority, the central office sets the strategic direction of the company and sets the boundaries for all of the other actors. This ensures that actors are empowered to contribute to goals while incorporating mechanisms to limit their ability to stray from them.

In both cases, external governance played a primarily limiting role for the CPPS initiatives. The structure of agriculture, supported by agriculture policy, made it difficult to find high-quality, local, sustainable producers, as much of the agriculture in the areas around Rotterdam and Berlin features large-scale commodity agriculture for export markets. This may limit the ability of the model to maintain its goals in growth, as the difficulty of sourcing products limits its ability to grow. Though the initiatives may have the effect of convincing producers to change their production to fit the CPPS model, in the short- and medium-term there is only limited potential in this regard, and agriculture policy and markets are supporting developments away from the type of production CPPS initiatives target. This may also contribute to the higher costs of CPPS products, since they are typically not supported by subsidies or regulations in the way that large-scale, world market oriented agriculture is. CPPS initiatives will either have to sacrifice their goals and integrate different types of products, or will be limited by the amount of products and producers available in their area. Yet the negative effect of external governance is not just limited to product sourcing. Support for socially innovative initiatives, especially in food, is very limited, and both initiatives found that policies and regulations posed a hindrance rather than a support to their growth and goals.

4.5.2 Differences

Food Assembly featured the extra level of the international company in internal governance. However, because of the strong emphasis on decentralisation and autonomy, the role of the international level was still primarily for support and to encourage learning and accountability, rather than making decisions.

The distribution of power and responsibilities among actors is not the same in the two structures studied. Rechtstreex, the central office plays a larger role in the business model and has more responsibilities than the central office in Food Assembly. Food Assembly uses language that is more empowering to describe its structure than does Rechtstreex. This includes terms such as autonomy, democratise, and autark, whereas Rechtstreex uses language such as horizontal, open, and free. The use of this language in Food Assembly may reflect the initiative's more pronounced emphasis on solidarity. The language may

also echo differences in the initiative's structure; yet the variances in structure may in themselves represent the slight divergences in philosophy that guides each initiative. The differences may also be the result of the German and Dutch contexts; Berlin and Germany are larger and less dense than Rotterdam the Netherlands. The contexts within which each pick-up point operates may be more likely to vary in Berlin than in Rotterdam. Therefore local, context-based solutions may be more appropriate and efficient than centralised solutions in Berlin than in Rotterdam. It is unclear whether the particular distributions of power and responsibilities within the initiatives' structures is better or worse suited to maintaining its goals in growth, or whether it is simply an adaptation to a different context, philosophy, or size.

Food Assembly also has more mechanisms built in for transparency and participation than Rechtstreex. This may have various effects on the initiative's ability to adhere to its goals in growth. On the one hand, more transparency and participation mean that there is a lower potential for conflict, and actors are empowered to contribute in more ways to the development of the initiative. On the other hand, this may lead to the weakening of goals, as the participatory process may favour inclusiveness over stringency.

Food Assembly's structure represents a more radical break from the structure of conventional food provisioning systems (i.e. supermarkets, weekly markets, and grocery stores). For example, payment is exchanged only online, and producers deliver their products in person directly to consumers rather than to an intermediary. Rechtstreex, on the other hand, keeps more elements from conventional systems. Food Assembly seemed to encounter more difficulties with external governance due to its more radically innovative nature. This is despite Food Assembly participants' expressed belief in the spirit of some aspects of external governance, such as consumer protection regulations. This demonstrates the unfitness of current food system governance for innovation, especially innovation targeted at small producers and local value chains, since the more innovative an initiative, the more hurdles it has to deal with. This may negatively affect the business model's ability to maintain its goals in growth. As initiatives grow, they are likely to attract more attention from regulators, which increases the risks of conflicts due to confusion about how to interpret and apply regulation to a case that does not fit cleanly into existing categories. This issue is documented among other AFNs as well (see chapter 2.3.2.5). The result of this may be that initiatives choose to limit their growth or change their format, both of which would limit their ability to maintain or achieve their goals.

4.6 REFLECTIONS ON THE TRANSIT HEURISTIC

4.6.1 Strengths of the heuristic

The heuristic was useful for identifying types of behaviours and change processes relevant to social innovation and transitions. By isolating and categorising actions into the four dimensions of empowerment, this heuristic made it possible to understand how initiatives' actions and structures contributed to change. It also helped to pinpoint ways in which initiatives were hindered or hindered themselves in affecting change. The heuristic broke down complex concepts into ideas that could be easily communicated to practitioners. The heuristic was an effective tool to define complex transition systems and communicate and apply them for practical empirical research.

Because the heuristic places much emphasis on empowerment, it was also useful for answering the research question. Empowerment is important for maintaining and achieving goals related to innovation and change. The heuristic took empowerment into account in conceptualising the relationship between social innovation and transitions. Therefore the heuristic provided an adequate tool to frame and structure empirical work and analysis for this case.

4.6.2 Recommendations for further development

The heuristic should differentiate between internal and external dimensions of empowerment. A difference could be observed in the internal and external processes and impacts of the dimensions of empowerment in both initiatives. This was especially apparent with learning and governance. It was observed that initiatives had less ability to influence external dimensions of empowerment; instead, initiatives seemed to be subject to them and also perceived themselves this way. For example, regional, national, and international policies determine the framework conditions within which the initiatives operate. The initiatives have little to no power to change these policies at this stage in their development. Yet each initiative's had much more power to determine their own internal governance structures and actions. If a differentiation between internal and external dimensions of disempowerment is incorporated into the heuristic, it is possible to better understand the dimensions' and actors' contributions to the shades of change. A differentiation can also help develop a more precise understanding of the role of internal and external actors and develop targeted recommendations for supportive actions. This is especially important if the heuristic is to find uptake for practical application.

Participants often had difficulties understanding the concept of narratives of change or defining the initiative's relation to it. The distinction between narratives of change and

system innovation and between narratives and societal transformation was challenging to communicate. Also, it seemed that storylines did not play a major role for the initiatives; instead, movements or concepts did play a role in the way that the initiative's identified themselves (also in terms of relating belonging to groups or movements). Examples include identification with the "food sovereignty" movement or the concept of decentralisation. Yet these concepts and movements could have also been categorised under other shades of change. Confusion about the narratives of change concept presents a hurdle especially for the practical applicability of the model. The model could be made more useful if the narratives of change concept was removed, and instead incorporated into system innovation and societal transformation as "key concepts or movements" within these two shades of change. This would allow the model to account for the importance of movements and concepts in processes of societal change, while minimising communication challenges and reducing the focus on storylines, which seemed not to be as relevant.

5 CONCLUSIONS

5.1 AREAS FOR FUTURE RESEARCH

CPPSs are a young innovation. As it is not possible to say that the business model itself prevents the problem of sacrificing or losing touch with goals when growing, it remains to be seen whether this will be the case with these two initiatives. It would be valuable to do follow up research after the initiatives have existed for a few more years to see how they have progressed, how their goals have changed or been maintained, and what drove any changes. The research demonstrated other knowledge gaps, such as:

- the role of expectation management and internal communication strategies
- the impact of social networks and connections
- the role and dynamics of consumer education and the importance of consumers as multipliers for consumer education efforts
- the effect of participatory processes in internal governance
- the reasons and effects of unequal resourcing between genders in CPPS

These would be interesting topics for future empirical and theoretical work.

Another valuable area for future research would be examining the dynamics of growth in more detail. This is already underway in part in the efforts to develop the TRANSIT heuristic and is a topic in the transition research community. Especially forward-looking models are still missing and need to be developed.

Furthermore, more research is required to understand the dynamics between policy, policy reform, and CPPS businesses. With a better understanding of these interactions, effective policy reform options can be developed, tested, evaluated, and implemented.

5.2 ACTION IN PRACTICE AND POLICY

The CPPS business model facilitates the maintenance of an initiative's goals in growth to some extent, but it is not a panacea for all the problems of AFNs or the food system. The model innovates the relationship between consumer and producer and creates new, viable value chains for local products. It also brings new values beyond monetary benefits, such as fostering social relationships and knowledge sharing in innovative ways. It gives consumers and producers more power in the food value chain through its socially innovative value chain reorganisation, thereby empowering more actors to contribute to the initiative's goals. At the same time, support and steering from the central office and the staff ensure that boundaries are set, visions are developed, and progress is made towards

goals. The growth strategy and structure of the business model function in a way that builds in mechanisms to ensure that goals are maintained during growth. CPPSs are effective for creating viable value chains to support small producers and short local supply chains.

However, the business model is not without its flaws. Comparison of the two cases demonstrated that effective structure for learning and monitoring is a matter of management and organisation, not inherent to the business model. The business model also reflects the goals of the initiatives', but as differences in initiatives' goals could be observed, this means that there are no goals that are necessarily inherent to the model. This is however not a discouraging conclusion; since goals are only built into the model to a certain extent, this means that it could also be applied to fields beyond food and adapted to the problems and goals of other fields and initiatives. It is therefore important for initiatives to be aware of this and integrate mechanisms of reflexivity into their business practices. They can maintain herewith an active relationship to their goals.

The CPPS business model relies largely on political consumerism and is still subject to hurdles from external governance, which limit the ability to grow and maintain goals. Because of the socially and culturally embedded nature of food provisioning and the difficulty of changing food-related behaviours, the chances that CPPS initiatives will grow to completely replace conventional food systems are slim. The relatively high prices and hurdle of readjusting to novel food provisioning practices are barriers that prevent lower income consumers and consumers who are less informed about food system issues from participating. This bounds CPPS initiative's ability to grow and to achieve their goals to within certain social groups.

Though these groups may change and expand over time as external factors change, CPPS initiatives themselves have little ability to influence such societal transformations alone. Without major changes in the framework conditions under which CPPS operate, such as public support for purchasing healthy foods or major cultural shifts in the way food is valued, CPPS will continue to reach and be dependent on a relatively limited consumer segment. Disempowering external governance could be changed with policy reform. If policy is redesigned to better support *sustainable* social innovation in food, local value chains, and small producers, CPPS initiatives would face fewer barriers and enjoy better framework conditions to thrive. The CPPS business model is affected i.a. by policies in:

- agriculture,
- innovation,
- food safety,

- social concerns,
- food systems, and
- regional planning

Policy reforms can be undertaken in all of these areas to improve the external governance conditions under which CPPS initiatives operate. For the most efficient effect, more attention should be paid to improving policy coherence, such as between agriculture and rural development policies.

In a sociopolitical climate trending ever more towards neo-liberalisation of food, empowering citizen consumers is one important step on the path towards a sustainable food future. Yet society cannot simply consume itself to a better future. Policy needs to step in to fill the gaps to which the market cannot provide a solution and set the conditions for sustainable solutions to flourish. Though social innovations like CPPSs can and should play a crucial role in transitioning to a sustainable food system, policy must be ready to step in when the limits of consumption as a conduit for change are reached.

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Annexes

ANNEX I – LIST OF ABBREVIATIONS

AFN	Alternative Food Network
CPPS	Community Pick-up Point Scheme
DE	Germany/German
EN	England/English
FA	Food Assembly
FP7	Framework Programme 7
ICT	internet and communication technology
LRQDO	La Ruche Qui Dit Oui (Food Assembly France/International)
NL	the Netherlands/Dutch
PO	participant observation
RTD	Rotterdam
RX	Rechtstreex
TRANSIT	“Transformative Social Innovation Theory” Project
YFM	Youth Food Movement

ANNEX 2 – LIST OF INTERVIEWS

ID#	Function/ Organisation	Date	Duration	Place	Language
1	Buyer, Rechtstreex (until Jan 2015)	2014.12.16	0:51	Rotterdam	EN
2	Wijkchef Hillegersberg Terbregge, Rechtstreex	2015.01.14	0:50	Rotterdam, neighborhood pick-up Hillegersberg Terbregge	EN
3	Wijkchef Kralingen, Rechtstreex	2015.01.19	0:38	Rotterdam (phone)	EN
4	owner Hoeksche Chips (producer for Rechtstreex)	2015.01.20	0:26	skype	EN
5	Communications at Rechtstreex (until Feb 2015)	2015.01.27	0:43	Rotterdam	EN
6	Assembly Host, Berlin Mitte ACUD, Food Assembly	2015.02.05	1:11	Berlin, café	DE
7	International Coordinator, Food Assembly	2015.02.11	1:00	Berlin, FA office	DE
8	Host Coordinator, Food Assembly Germany	2015.02.17	1:04	Berlin, FA office	DE
9	Managing Director, Food Assembly Germany	2015.02.17	0:58	Berlin, FA office	DE
10	Assembly Host Berlin Wedding Himmelbeet, Food Assembly	2015.02.17	1:00	Berlin, cafe	DE
11	Producer (organic vegetables) for Food Assembly, Luchgärtnerei	2015.02.18	0:45	Berlin, cafe	DE
12	Fördergemeinschaft ökologische Landwirtschaft (FA partner organisation)	2015.02.25	0:15	Berlin (phone)	DE

ANNEX 3 – EVENTS AND MEETINGS ATTENDED AS PARTICIPANT

OBSERVATION

Meeting/event	Date & Time	Location	Description
RECHTSTREEX			
Pick-up at Hillegersberg Terbregge Pick-up point	2015.01.14, 20:00-22:30	Rotterdam	RX members picked up and paid for their orders from pick-up point, followed by interview
Visit to Rechtstreex shop at Fenix Food Factory	2015.01.07, 12:30-13:00	Rotterdam	Visited shop in hall featuring small high-quality food shops and purchased some products
Visit to hotel restaurant/bar selling Rechtstreex products	2015.01.17, 20:00-20:15	Rotterdam	Visited hotel with small stand selling RX products
Phone call with RX founder	2015.01.20, 15:15-15:40	phone	Discussed details of cooperation w/ RX, questions about business structure and vision
Pick-up at Midelland pick-up point	2015.01.21, 19:30-23:00	Rotterdam	RX members picked up and paid for their orders from Wijk pick-up point, helped pack leftover orders
Management Meeting	2015.01.26, 13:30-15:30	Rotterdam	Weekly meeting w/ 2 founders, junior marketer, regiocoordinators RTD and Utrecht. Also discussed research issues, results, questions
FOOD ASSEMBLY			
Meeting for potential hosts	2015.02.02., 18:00-19:30	Berlin	meeting for people who are interested in becoming hosts or who are preparing to open a pick-up point
Assembly Pick-up at ACUD Mitte	2015.02.04., 16:00-21:30	Berlin	Members picked up orders from producers, conversations with producers and some consumers, helped set up and take down
Meeting to discuss new Assembly	2015.02.05., 14:00-15:00	Berlin	Meeting with staff and potential hosts to discuss motivation, requirements and next steps for opening assembly
Team meeting	2015.02.09., 11:00-13:30	Berlin	Weekly team meeting to discuss relevant issues for that week/month
Communication meeting	2015.02.12., 11:00-12:00	Berlin	Meeting to discuss communication topics
Assembly Pick-up at ACUD Mitte	2015.02.18., 17:45-20:15	Berlin	Members picked up orders from producers, conversations with producers and some consumers

Meeting/event	Date & Time	Location	Description
Assembly opening Willner Brewery Pankow	2015.02.19., 19:00-20:00	Berlin	Opening party for new Assembly location
Producer "Stammtisch" meeting	2015.02.25., 20:15-22:00	Berlin	Meeting with producers and producer coordinator

ANNEX 4 – PRIMARY AND SECONDARY SOURCE DOCUMENTS

Primary Sources

ID#	References	Year
RECHTSTREEX		
RX-1	Rechtsreex website	n.d.
RX-2	Rechtstreex twitter	n.d.
RX-3	Rechtstreex facebook page	n.d.
RX-4	Rechstreex lunch facebook page	n.d.
RX-5	Rechtstreex Midelland newsletter	2015
FOOD ASSEMBLY		
FA-1	Food Assembly Deutschland Twitter @foodassembly_de	n.d.
FA-2	Food Assembly Deutschland Website	n.d.
FA-3	Food Assembly "Who we are"	2014
FA-4	FA DE blog	n.d.
FA-5	FA UK blog	n.d.
FA-6	FA DE and Berlin facebook pages	n.d.
FA-7	FA Berlin individual assembly facebook pages	n.d.
FA-8	Other German FA facebook pages	n.d.
FA-9	Food Assembly "Werte und Ziele"	2015
FA-10	Producer advertising brochure	2014

Secondary Sources

Title	Year	Type
RECHTSTREEX		
Rechtstreex: "Supermarkten kennen het verhaal niet achter hun producten. Wij wel"	2014	website
Food Guerilla participant profile: Rechtstreex	2014	blog
Rechtstreex: streekproducten bestellen en afhalen in de eigen wijk	2014	industry journal
Review: gezond eten met maaltijdabonnement van rechtstreex	2014	blog
Wie, wat, waar in de fenix food factory	2014	website
Koffietijd: Rechtstreex van de Boer	2015	television
Stichting Doen website	n.d.	website
FOOD ASSEMBLY		
„Sharing Economy: Teilen und Tauschen – Mehr als nur ein Trend?“ Arte documentary ft. LRQDO	2014	documentary
Blog article about Endorphina Vegan Assembly opening, NK	2014	blog
"Den Bauern treffen, der das Abendessen erntet"	2015	newspaper
"50 000 Menschen fordern den Stopp von Tierfabriken, Gentechnik und TTIP: Bauern und Verbraucher gehen vereint für eine Agrarwende auf die Straße"	2015	press release

Declaration

I hereby declare that the present thesis has not been submitted as a part of any other examination procedure and has been independently written. All passages, including those from the internet, which were used directly or in modified form, especially those sources using text, graphs, charts or pictures, are indicated as such. I realize that an infringement of these principles which would amount to either an attempt of deception or deceit will lead to the institution of proceedings against myself.

Berlin, 7 April 2015

Keighley McFarland