# 'LOCAL' LEVEL ANALYSIS OF FNS PATHWAYS IN THE NETHERLANDS

*Exploring two case studies:*
*Urban Food Initiatives and Food Bank Practices*



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## About TRANSMANGO:

TRANSMANGO is an international research project that aims to explore diverse transition pathways to a sustainable and secure food system. It is funded by the European Commission and runs for four years, from 2014 until 2018. The Transmango consortium consists of 13 partners from nine European countries and Tanzania. For more information, visit our website: http://www.transmango.eu/.

## About this Document/Disclaimer:

This report is part of Work Package 6 of TRANSMANGO which is focussed on 'local' level analysis of FNS pathways in Europe. This report is based upon 'D6.1 Case-study selection and methodological guidelines for local level analysis of FNS Pathways' (transmango.eu). The guiding research questions for the Work Package 6 'local' level analysis were:

1. To what extent, and how, do the selected FNS practices / pathways reflect novel responses to FNS concerns in specific settings?
2. To what extent are these novel practices / pathways promising and successful?
3. To what extent do the stakeholders involved search up- and out scaling potentials?
4. How do stakeholders characterize their interaction with institutional settings?
5. How relevant is EU level policy making in this interaction with institutional settings?

This report is focussed upon **Urban Food Initiatives** and **the Food Bank in the Netherlands**. This report presents the interpretations of the researchers, and does not necessarily reflect the views and nuances of the initiatives and respondents themselves. In total there are nine separate 'local' level analysis reports from ten consortium members and they will feed into the 'D6.4 Syntheses report on FNS pathway-specific drivers, potentials and vulnerabilities'.

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Photo on cover: Two volunteers sorting harvested vegetables at urban agriculture initiative the *Stadsakkers* in Eindhoven, The Netherlands © Aniek Hebinck, 2015

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# List of abbreviations

| | |
|---|---|
| EFRO | European Regional Development Fund |
| ESF | European Social Fund |
| FAO | The Food and Agriculture Organization of the United Nations |
| FCC | Food City Council |
| FEAD | Fund for European Aid to the Most Deprived |
| FNS | Food and Nutrition Security |
| HH | Hotspot Hutspot (an urban food initiative) |
| MRDH | Rotterdam-the Hague Metropolitan Area |
| NIBUD | Nationaal Instituut voor Budgetvoorlichting (Dutch National Institute for Family Finance Information) |
| SVN | Foundation Food Banks of the Netherlands |
| UA | Urban agriculture |
| UFI | Urban food initiative |
| UJES | Uit Je Eigen Stad (an urban food initiative) |
| VNV | Vereniging Nederlandse Voedselbanken (Association of Dutch Food Banks) |
| VWA | Voedsel en Warenauthoriteit (Netherlands Food and Consumer Product Safety Authority) |

## 1. INTRODUCTION

The purpose of this report is to provide insights into local transition pathways in the European food and nutrition security (FNS) landscape and will feed into the WP6 synthesis focused on the heterogeneity of FNS transition pathways. This report sets out to explore FNS pathways in the Netherlands with a focus on practices that aim to build self-reliance and practices that aim to alleviate vulnerabilities. We draw from Mougeot's (1994) discussion on Urban Agriculture and food self-reliance in that we do not equate self-reliance to self-sufficiency, rather, we use self-reliance to distinguish and discuss practices that focus on issues of (re)localization of both agriculture and decision making (Allen,1999). In contrast, we refer to practices that alleviate vulnerabilities as relating to issues of food entitlements (Sen 1981; 1987). To explore these practices we have chosen two diverse case-studies that span over most of the Netherlands: urban food initiatives and food banks. The first case, urban food initiatives, is the 'main' case which will include a foresight workshop. The second case about the food bank is a lighter 'satellite' case.

### Main case-study

We define Urban Food Initiatives (UFIs) as a broad category to refer to projects or enterprises whose aim is to improve the local FNS landscape. More specifically, through their work on a wide range of themes (intra- and peri-urban agriculture, short food supply chains, education, urban green space, and knowledge sharing), UFIs seek to impact the stability and control of food availability, access, and utilization of the local population. We explore the practices of UFIs in order to assess the degree to which they contribute to the self-reliance of urban communities. The main focus of this case is to identify emerging FNS pathways related to urban food governance.

The Netherlands is fertile ground for this exploration. First, the Dutch population is one of the most densely concentrated (500 people per square kilometre) and also amongst the most urbanized in the world with 90% of people living in urban areas (World Bank, 2015a,2015b). Secondly, Dutch agriculture is highly modernized. Its development was driven by post-war era policies that encouraged mechanization, the use of mineral fertilizers and chemical pesticides, as well as specialization. The intensification of agriculture has resulted in a highly productive and cost efficient sector (Bos et al., 2013). Dutch agriculture has a significant role in the economic configuration of the Netherlands. The sector generates 9% of the GDP and 9% of employment (Ministerie van Economische Zaken, 2015). To put this into perspective, the Netherlands is the second biggest exporter of agricultural produce in the world, only after the United States (Government of the Netherlands, 2015). While Dutch agriculture, specially livestock farming, is recognized for its productivity rates in the last decades, its highly intensive nature has been questioned in the face of the negative externalities and unintended side effects that it has generated (Bos & Koerkamp, 2009).

Against this background, the number and diversity of Urban Food Initiatives in the Netherlands has rapidly increased over the last decade. A rough distinction can be drawn between commercial and non-commercial types of urban agriculture (often with expressions of hybrid models in between). Within this spectrum in the Netherlands we find allotment and community gardens, rooftop and balcony food growing, bee and chicken keeping, education and recreational gardens, as well as urban and peri-urban farms. Commercial urban agriculture can take different shapes. Approaches observed in the Netherlands revolve around three market strategies: product differentiation, that is, offering forgotten varieties of fruits and vegetables or produce suited for foreign cuisines; vertical integration, this means that further value is added by processing, and/or packaging, and/or distributing the product on site; diversification of activities, which includes land and nature management, social care services, education and recreation (van der Schans, 2010). Logically, the diversity in urban agriculture (UA) initiatives results and is also connected to the diversity of actors who voluntarily or for profit are initiators and/or collaborators. This range includes individual citizens, entrepreneurs, housing corporations, sub-municipal governments, artists and community organizers (Veen, 2015). Due to different drivers, spatial configurations, and a range of

societal factors, we see UFIs having a longer history in some cities than in others. For this study we looked at UFIs in the Dutch cities of Rotterdam and Eindhoven. The experience of food initiatives and policy in Rotterdam is longer in comparison to other urban areas in the country; as we will review later the city's spatial conditions and culture have created a favourable context for UFIs. Eindhoven, on the other hand has recently shown increased interest and activity; efforts are currently taking place to develop an Urban Agriculture Policy for the city. For TRANSMANGO this provides rich data as it allows a longitudinal look at how these initiatives have emerged, developed, and their relevance in terms of urban food governance.

## Satellite case-study

The principal aim of food banks is to aid the food insecure directly, herewith addressing the most vulnerable groups with the associated entitlement issues to food. However, all food banks have their own routines, patterns and ways of connecting FNS resources. We explore to which extent the food bank can contribute to a transformation in FNS when it comes to the food insecure in the Netherlands. In the case of the food bank our focus lies on how actors in the Food Bank are involved in these FNS practices and how they construct other transition pathways.

Although the Netherlands has come out of the recession of 2008-2009 relatively well – employment even rose slightly during the recession – there are still approximately 720.000 households (of 7.1 million) with low incomes (SCP and CBS, 2014). According to NIBUD (National Institute for Family Finance Information) households with a low income that live of welfare assistance come short of money every month and they are likely to cut on items like clothing and food[1]. This is reflected in the increase of applications that the Dutch food banks witnessed during this period. The number of households relying on the help of food banks has almost tripled in the year 2014, making it difficult for the food banks to supply the needed adequate amount of quality food. Although the Russian boycott has lately caused an increase in fresh produce for food banks, they still come short. There have been some social movements that have tried to connect food banks to supermarkets and restaurants in an attempt to reduce food wastage; however food safety legislation is proving to be hard to meet. Considering that all over the Netherlands there are local operations –154 local food banks in the Netherlands – this provides room for many different approaches and food banks. The dissimilar nature of these charitable food-aid operations also make it an especially interesting site to explore, for each have their own local leaders and contexts to consider, but also different goals and objectives.

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[1] NIBUD – Gezinnen op bijstandsniveau komen structureel geld tekort: http://bit.ly/1vqderk

## 2. URBAN FOOD INITIATIVES CASE STUDY REPORT

### 2.1. Research questions & Methods

For this case study we see UFIs as (re)assemblages. Assemblages are composed of heterogeneous elements that may be human and non-human, organic and inorganic, technical and natural (Anderson and McFarlane 2011:124). Murray Li (2007:265) defines reassembling as the 'grafting of new elements and reworking old ones; employing existing discourses to new ends'. More specifically, socio-material and natural realities and practices are reassembled to form new ones that did not exist before. Therefore, UFIs are defined as the locus where complex interactions and interlinkages between actors, practices, and institutional settings transform into different degrees of agency and capacity to mobilize resources. The emphasis is placed on what these (re)assemblages do in terms of urban food governance pathways. The aim is to generate relevant insights on urban food governance pathways that can inform debates and policymaking processes (capacity to intervene) on issues related to self-reliance in food and nutrition security (FNS).

The case is guided by the following key research questions:

1. What are the interaction patterns amongst and between initiatives and between initiatives and the wider policy and institutional settings?
2. To what extent are the initiatives successful in terms of resource mobilization?

To answer these questions we explore urban food initiatives in two Dutch cities: Rotterdam and Eindhoven. This combined exploration is designed to allow for a more temporally ample study of urban food governance. On the one hand, Rotterdam has gained both national and international attention for the number of urban agriculture and food gardening initiatives that have sprung in the area in the last decades as well as its policy focus on urban food and agriculture as a strategy for creating a greener and healthier city. A growing number of diverse initiatives, underpinned by a philosophy of entrepreneurship and a social orientation, characterize the dynamic urban foodscape of the city. For this study we explore UFIs in Rotterdam with a focus on their development in the last decade primarily to generate insights about the extent to which a city with a longer UFI tradition manages to develop and implement an active and consistent urban food policy.

On the other hand and in order to complement our study with a future oriented perspective we explore the city of Eindhoven, in particular their multi-stakeholder process to develop an urban food policy for the city as it enables us to observe how other Dutch cities are reflecting on and articulating their role and future prospects of urban food policy. Eindhoven, the former business centre of the technology company Philips, is a city that is known for its excellence in bringing design and technical innovation together. The municipality of Eindhoven noticed a sharp growth of interest in UFI's within their region; the council accepted a motion that gave space for the development of policy around urban agriculture. By exploring the on-going process of policy making we can interrogate the different interaction patterns between the different actors involved in UFI's.

We used several data collection methods for this case study. Rotterdam has repeatedly been the object of research efforts in the last years. This has generated a sizeable body of data on urban agriculture as well as food provisioning and planning in Rotterdam. As a side-effect there is also a certain degree of research fatigue amongst the key actors behind urban food initiatives in the area. For the exploration of UFIs in Rotterdam we carried document analysis of secondary data on the topic. As mentioned before, Rotterdam is relatively well covered in research and other professional publications. As a way to verify and complement our document analysis we carried out two semi-structured qualitative interviews with key actors from the Rotterdam urban food policy arena. The interviews were recorded, transcribed and analysed for themes on practices, interaction patterns (between actors and with institutional arrangements), and capacity (or lack thereof) to mobilize resources.

The Eindhoven case was explored through collaboration with the organisation Proeftuin040; a knowledge platform that focusses on urban agriculture in the city-region of Eindhoven. The municipality assigned them the task to develop a policy that was able to capture and facilitate the UFI scene and was, contrary to other policies, developed by the actors from the scene, rather than the civil servants of Municipality Eindhoven. This provided us with the opportunity to latch on to and to assist in multi-stakeholder workshops organised by Proeftuin040. Over the course of 8 months (see table 1) there have been multiple workshops that connected to the needs of Proeftuin040 and complemented their already planned meetings. The participants for these workshops were invited by Proeftuin040 and were mostly part of their existing network around urban agriculture. The in total over 100 participants that have been involved in the entire process came from different sectors; the municipality, regional government, housing corporations, community centres, social welfare organisations, GGD (regional healthy authority), urban food initiatives, retailers, landscape architects, design studios, and (applied) universities. Some workshops were held with the *Stamtafel*, which is a group of Proeftuin040's regular consultants that are rooted in the city-region of Eindhoven and are involved in various ways in UFI's.

TABLE 1 OVERVIEW OF WORKSHOPS AND COLLABORATION BETWEEN PROEFTUIN040 AND TRANSMANGO

| Timing | Meeting | Purpose |
|---|---|---|
| Nov 2015 | Proeftuin040 initiated multi-stakeholder workshop 1 | First introduction to the policy process and start of visioning, approximately 35 participants |
| Nov 2015 | Small meeting between Proeftuin040 and WUR-team | Discuss how to align TRANSMANGO means to fit needs of Proeftuin040 |
| Dec 2015 | 'Seeds Game' with the *Stamtafel* | Game that helps to explore possible innovative (unexpected) collaborations between actors |
| Dec 2015 | Proeftuin040 initiated multi-stakeholder workshop 2 | Continued visioning that was thematically clustered by Proeftuin040, 32 participants |
| Mar 2016 | Additional visioning session with the *Stamtafel* | Bringing together the gathered input and filling gaps |
| Apr 2016 | Expert consultation organised by WUR-team on the topic of (urban) food policies | Meeting with Proeftuin040, WUR-team and Jan Willem van der Schans (LEI) and Henk Renting (RUAF foundation) |
| Apr 2016 | **TRANSMANGO multi-stakeholder workshop 1 – Back casting** | Back-casting the (by Proeftuin040) identified most important clusters from the visioning process |
| May 2016 | Proeftuin040 'city debate' | Presentation of policy making process so far at city hall with opportunity for citizens to react |
| Jun 2016 | **TRANSMANGO multi-stakeholder workshop 2 – scenarios** | Testing the vision and back-casts using scenarios that were developed by TRANSMANGO and pre-downscaled by Proeftuin040 |

The planned TRANSMANGO workshops were the back-casting and scenario sessions (in bold in table 1) and diverted from the original planning in order to align with the timing and process of Proeftuin040. After deliberation with Proeftuin040, the two foresight workshops focussed on creating a vision of the future that was then tested with scenarios (created in work package 3) to make it more resilient in the face of uncertainties in the future. This fit well with the organisation's ideas and needs, as their plan was to start the policy making process with a multi-stakeholder based visioning process that would ultimately lead to a future vision of urban agriculture in the city-region that the municipality could facilitate and work towards. Although a scenario-workshop as such was not initially planned by Proeftuin040, they were eager to explore how different futures would affect their vision of urban agriculture in Eindhoven. Moreover extra meetings had been arranged to create some in-depth knowledge around pre-existing food policies and ongoing projects and activities that might prove useful to the Proeftuin040 team.

## 2.2. Research findings

### *Literature review*

As introduced earlier, this case study focuses on Urban Food Initiatives (UFIs). It is important to clarify that we employ this term as an umbrella category under which we identify programmed activities or enterprises whose aim is to improve the food and nutrition security (FNS) of the local community. UFIs in our case engage with different dimensions of FNS through their practices; they work on themes such as intra- and peri-urban agriculture, short food supply chains, food education, urban green space, and knowledge sharing. We are aware that the notion of Urban Agriculture (UA) has evolved conceptually and practically in the last decades to the point where it is often used to refer to diverse activities beyond the traditional focus on production (Mougeot, 2000; Veen, 2015). However, for this case study we employ UFIs in order to enable a broader discussion not only about initiatives that are part of the UA movement (and identify as such) but also about related processes and practices that are linked to their operationalization e.g. practices of mediation, multi stakeholder dialogue, citizen participation and representation, policy making, etc.

To provide some background we will shortly discuss the conceptual and practical contours of UA as well as the key aspects on the food practices related and/or supporting their operationalization. Urban Agriculture, as a concept has evolved from the early documentation about intra- and peri-urban agriculture in Central Africa in the 1960's to increasing and more comprehensive accounts of experiences with UA in a diverse set of regions and cities (Mougeot, 2000). The Food and Agriculture Organization of the United Nations (FAO) defines UA as the practice of growing food and raising animals in and around the city (FAO, 2016). In the late 1990's the debate focused on recognizing urban agriculture and its broad contribution to the city: food nutrition and security, especially for low-income groups, improved public space aesthetics, enhanced community solidarity (due to higher interaction), employment, income generation, as well as a range of environmental benefits (e.g. increased biodiversity, better air quality, temperature regulation, reduced vulnerability to natural disasters, etc.) (Smit et al., 1996). In addition, it was highlighted that the impact of UA could be seen not only in the global south but it also had relevance for cities in the global north (Bakker et al., 2000).

Differentiating the context where UA practices take place has framed more specific debates about their types and the potential contribution it could have in developing and developed regions. FAO focuses on the capacity of urban agriculture to improve food security: "(UA) can make an important contribution to household food security, especially in times of crisis or food shortages…consumers - especially low-income residents - enjoy easier access to fresh produce, greater choice and better prices" (FAO, 2016). This is more aligned with debates about UA in cities in developing economies. In the typology of Cabannes (2006) this would fall under the category of subsistence and crisis mitigation. In discussing UA in the context of a developed economy, van der Schans and Wiskerke (2012) depart from the definition provided by Smit et al. (2001):

> *An industry that produces processes, and markets food, fuel, and other outputs, largely in response to the daily demand of consumers within a town, city, or metropolis, on many types of privately and publicly held land and water bodies found throughout intra-urban and peri-urban areas. Typically urban agriculture applies intensive production methods, frequently using and reusing natural resources and urban wastes, to yield a diverse array of land-, water-, and air-based fauna and flora, contributing to the food security, health, livelihood, and environment of the individual, household, and community.*

They highlight several aspects; first, the fact that UA is an industry and as such it is a response to market demand executed by professionals. This implies that UA practices are considered for their role in urban food provisioning. Secondly, UA is found inside and around the city (not in rural areas). The closeness to urban centres results in farming practices that instead of trying to compete in cost with conventional large-scale agriculture focus on building upon its weaknesses, creating a different value proposition. For

example, UA farms have smaller but more intensive operations; they grow high-value crops often uncommon varieties and frequently using alternative methods with higher environmental/social performance. Because of their location urban farms are also able to offer recreation and social services (e.g. care farms) in the vicinity of the city. Thirdly, UA targets local markets through short food supply chains, which in turn perform better when it comes to delivering fresh and varied perishable products. Finally, UA is well placed to seek circularity, reconnecting underused material and energy flows as well as waste (albeit sometimes hard to operationalize in developed economies given the design of their urban waste systems).

Through these debates scholars and practitioners often use data on the increasing and significant role of urban agriculture in diverse contexts, not only to emphasize its benefits in terms of food security and quality of life in cities, but also to stress the inattention to UA in urban planning and policy making. Sonnino (2009) argues that the reasons why policy makers have not fully engaged with questions about food and urban agriculture while addressing food provisioning and city planning is because there is a lack of studies detailing the specific context and circumstances under which UA can deliver its potential benefits for the city. Additionally, despite the evident interconnection between the city and the rural areas there is a strong inertia from policy makers and other relevant actors to think in terms of an urban-rural dichotomy (Redwood in Sonnino, 2009). This results in framing food provisioning failures as something related to agriculture and therefore to the rural policy context, as opposed to considering the role and potential of cities as innovators in the field of food policy (Mansfield & Mendes, 2013). Additionally, it is argued that in developed economies the need or urgency to consider UA as a component of the food provisioning system is still low. Despite the externalities and weaknesses of conventional agriculture, this arrangement continues to play a key role in fulfilling food provisioning needs in the city. Additionally large-scale and long(er) supply chains are continually adapting by addressing societal concerns for example, on traceability (e.g. where does my food come from?) and environmental impact (van der Schans & Wiskerke, 2012). The resilience of conventional agriculture leaves little room to explore and assess the role of UA in food provisioning.

Mougeot (2000) argues that understanding the way in which UA is "different from, and complementary to, rural agriculture in local food systems" as well as how it is locally integrated into the socio-economic and ecological systems will strengthen the discursive and practical use of UA for stakeholders including policy makers. This would set a foundation to systematically evaluate and stimulate UA in urban communities. In terms of policy perspectives, Dubbeling et al. (2011) argue that it is key for city governments to articulate the role and expected contributions of UA to policy goals. In doing so, the specific policy entry points will become clear and the linkages of UA to certain urban problems such as the lack or deterioration of public green spaces, issues of social integration, low awareness of healthy lifestyles and diets, and other environmental services can be draw more effectively (van der Schans & Wiskerke, 2012). An increasing number of cities in both Global South and North are recognizing the value of formulating policies that "acknowledge and reclaim jurisdictional responsibility for food system activities" (Baker and de Zeeuw, 2015: 26). As these urban food system activities are well embedded in the city's infrastructure and linked to a multitude of sectors they require policy-making processes to be approached multidisciplinary. Interdisciplinary policy formulation in this case will lead to "more participatory governance and public-private partnerships" and "enhances the likelihood of implementation success and sustainability" (de Zeeuw and Dubbeling, 2015: 58). However as Wiskerke (2015: 20) emphasizes: "one of the key challenges is to organize the administrative and political responsibility for an urban food strategy", which is a risk for successful implementation. In the following section we will discuss the current state of the UA movement in Rotterdam, a case that has established its UA scene and has a Food Policy Council since 2014. The initial process of policy formulation around UA will be explored through the in-depth exploration through workshops of Proeftuin040's UA policy-making efforts for the municipality of Eindhoven.

### *Rotterdam*

The city region of Rotterdam is well known for being the largest seaport in Europe. Sitting on the Rhine, Meuse, and Scheldt river delta, the port hosts a world class industrial complex and serves as international hub with an annual throughput of more than 421 million tonnes of goods (Port of Rotterdam, 2015). The city's international character is also expressed in its highly multicultural and multi-ethnic population; close to 45% of its residents are of non-Dutch origin (with large communities originating in Suriname, Turkey, Morocco, Antilles, Cape Verde, and Indonesia among others) (Gemeente Rotterdam, 2015). More specifically and of especial interests for this study, Rotterdam is also characterized, and differentiated from other Dutch cities, by its spatial configuration. In May of 1940 German air forces bombed the centre of Rotterdam; 258 hectares were destroyed not only due to the bombardment itself but also to the resulting fires that, fed by strong winds, lasted several days (NA, 2016b). Inspired by the modern American cities of the 1920s, specifically Chicago, the pre-war urban and spatial planning of Rotterdam was already following a 'modern metropolis' grammar (i.e. motorized traffic, tall buildings and broad streets with brightly lit shops and advertisement). The bombing of the city centre created the space to continue the pursuit of a world-class metropolis and renew its architecture. Therefore, in comparison to other cities in the Netherlands, Rotterdam is characterized by a spatially extended city and the availability of open space right in the city centre (van Ulzen, 2007). In addition to this, an industrial background and 'hard working' culture have traditionally defined Rotterdam as its population has been long connected to the port's labor market (jobs requiring lower-skilled and lower-educated workers). This do-attitude, according to Noordegraaf and Vermeulen (2010), is not only summarized in the quote 'in Rotterdam, shirts are sold with their sleeves rolled up' but was mirrored in the last decades by (predominantly social-democrat) city administrators too, giving the city administration its hard working nature. The city and its port have also had a significant role in the evolution of Dutch agricultural and food systems; it facilitated, through cheap imports of feed ingredients, the intensification of the livestock industry (the epitome of this being the pig and poultry sectors) (van der Schans, 2015b). In the last decade, Rotterdam has gained increased attention for its focus on urban food and agriculture especially in relation to the city's approach for creating a greener and healthier city. The dynamic urban foodscape of Rotterdam is characterized by the growing number of diverse initiatives that are often underpinned by a philosophy of entrepreneurship and a social orientation.

### Governance context

#### Rotterdam

Another relevant aspect of Rotterdam and one that is important in terms of the governance context is the increasing functional integration of the Rotterdam-The Hague Metropolitan Region (MRDH). This group of 23 municipalities situated in the southwest of the country account for 2.2 million inhabitants. The region features not only major cities such as The Hague and Rotterdam but also Delft, which is characterized by its education and knowledge driven institutions. The Westland area, with its leading horticulture business operations and the port, are also part of this region. This regional cluster emerges as a strong economic area in the country especially in the clean tech, medical, food and maritime sectors. A key focus has been on transport, the region features very developed internal rail and bus services as well as connections to cities such as Amsterdam, Utrecht, Eindhoven, Paris, Brussels, and beyond through its regional airport and its close connection to Amsterdam's international airport Schiphol (Gemeente Rotterdam, 2010; Meijers et al., 2012; NA, 2016j). As part of its aim to boost its competitiveness as a metropolitan region, an emerging challenge is that of space. There is increasing competition in land use claims for the progressively scarce space in the region. Both Rotterdam and The Hague are expanding (in fact, towards each other) and other uses that are competing for space are agriculture, horticulture, green areas, housing, offices, and space for climate adaptation (Meijers et al., 2012).

We look further at the governance context over the last decade with a focus on food relevant developments. In 2007, a brainstorm meeting on -New Relations between Cities and Agriculture- took

place; it was organized as part of an innovation program from the Ministry of Agriculture, and included a variety of stakeholders from the academic, private, and civil spheres. By the end of it, a range of issues were on the table however the city was not prepared to address the outcomes of the discussion. From that meeting, a group of diverse participants decided to set up an expert group on urban farming: Eetbaar Rotterdam (Edible Rotterdam) (Supurbfood 2015 report). This group, that is still active today, organized events and presentations with the goal of putting urban agriculture on the agenda.

In 2008, the Municipality of Rotterdam declared that year as the -Green Year-. This translated in special attention to green urban spaces (Enzlin & Rotterdam Marketing, 2008). As part of this renewed focus the city's planning department reviewed its public space policies as well as the use of green spaces in the city. The results showed that green public spaces were underutilized (they were perceived to be too uniform and poorly maintained) at the same time urban agriculture was part of the debate as a potentially interesting perspective to solve these issues.

An Urban Farming think tank was set up in the municipal organization in 2010. This think tank was designed for civil servants as a platform to facilitate urban and peri-urban farming initiatives and discuss relevant policy issues. This platform served as a meeting point where urban farming initiatives networked. Additionally, its work consisted in advising the alderman for Sustainability, Inner City and Outdoor Space about the promotion of urban agriculture in Rotterdam as well as formulating policy goals in interaction with different city councillors. The city, which by now possessed an increasing understanding of the potential of urban farming (and related food initiatives) to solve urban issues, faced budget limits and instead of developing an official urban food strategy (which was an emerging approach in other cities) decided to encourage and support bottom-up community and entrepreneurial initiatives. A five-point action plan was developed to (1) increase the visibility/accessibility of food growing in and around the city, (2) organize short food supply chains (logistics, farmers' markets), (3) consider local food in public procurement, (4) improve the long-term economic viability of peri-urban farmers, and (5) stimulate edible green roofs in the city centre.

In February of 2012 the municipality of Rotterdam issued a document entitled: Food and The City, Stimulating urban agriculture in and around Rotterdam. It is relevant to highlight that the document signals a food policy perspective that is not only focused on the inner city but where linkages to the neighbouring rural and agricultural areas are recognized and incorporated. The document (with versions in English and Dutch) described the aims of the city in terms of urban agriculture, its strategy, and some examples of relevant initiatives. The document referenced its inspiration to the analysis carried out during the 2008 Green Year, the 2010 Omnibus survey (which showed that the population appreciated the Midden-Delfland agricultural landscape and a quarter of the city's residents visited the area at least once a year), as well as the elaboration of food strategies by other metropolitan areas such as Toronto, London, Chicago, New York, and Vancouver. The Food and The City document delineated three priorities: health (key items: healthy nutrition and new community gardens); sustainable economy (with focus on: agricultural entrepreneurship in and around the city, short food supply chains, green jobs, and reduction of food miles); and spatial quality (including the facilitation of initiatives from residents and civil organizations and supporting urban agriculture and new forms of green space management) (Gemeente Rotterdam, 2012).

More recently in 2013, the city established a regional Food Council. Here the regional focus and thus widening of the food policy perspective is also visible. This council is an independent multi-actor network organization (with no budget) with members representing different nodes of the food chain (peri-urban and urban farmers, chefs, an organic supermarket, researchers, two mayors of neighbouring municipalities, educational bodies, an actor from a vegetable auction operation, and a large multinational food company with several production facilities in the port area). The Food Council advices the city on food related issues and aims at supporting food initiatives in the city, boosting the local food economy, as well as promoting new models for food chains. The action-oriented work program of the Food Council

focuses on three areas: improving relations between town and country (short food supply chains); education and communication (focusing on youth at schools and families), circular economy and innovation (a broad range of topics such as reducing food waste, energy, and bio-based economy) (Gemeente Rotterdam, 2014)

After local government elections in 2014, the new coalition's approach reflected a more conservative way of thinking. Food is argued to no longer be framed as a social and/or ecological issue, but instead as an economic one. This is reflected in the restructuring of municipal departments. Traditionally short food supply chains and urban agriculture would have been dealt by the planning department; this is now merged with the municipal economic development and the civil works department. The new unit addresses the topic of food and the food industry primarily from an economic perspective, which then shifts the focus towards fresh logistics, employment, education, etc. (van der Schans, 2015b).

Finally, Rotterdam's food cluster is the third most important in terms of economic activity. The port of Rotterdam is a key player in the global trade and chain logistics of perishable and fresh produce (being second largest export port worldwide of vegetables, fruit and flowers). The Rotterdam area is the logistics hub for the food industry with approximately 5,800 companies specialized in the handling, production and distribution of food and food related products. In recognizing Rotterdam's assets and strategic position in terms of agri-food and (future) biofuel logistics for Europe, the city has "launched the Rotterdam Food Cluster to be one of their key policy strategies" (Wascher et al., 2015).

### UFIs and (FNS) practices

What follows is a description of a selection of urban food initiatives in Rotterdam. This selection shows different ways in which food enters the social and economic landscape of the city. It does not aim to be representative; rather it has been purposively sampled to highlight the dynamics between actors, practices, and institutional settings. This description will be followed by a discussion on their capacity to mobilize resources and impact the self-reliance of urban communities.

### Peri-urban and Urban agriculture UFIs

*Uit Je Eigen Stad* (UJES) opened its doors in the autumn of 2012 as the first commercial urban farm in Europe. UJES is located in 2.3 ha of land (formerly a vacant plot) in the west port area. They have multiple lines of work, these include, a vegetable farm (in early 2016 their aquaponics, chicken and mushroom growing operations stopped), farm shop, restaurant, educational and recreational activities, and conference facilities.

Initiators/ key actor(s): Entrepreneurs (Bas de Groot, Johan Bosman and Huibert de Leede)

Resource/business strategy: the initial investment of 1.1 million euros was attained from four sources: the housing corporation Havensteder invested 65% in preparation of the premises, including new topsoil; this is paid back as rent over the course of ten years. Three additionally loans were granted by Stichting Doen (15%), Rabobank (8%) and Gulpenerberg and Zegro (2%, for catering arrangements). All four loans were granted with market interests rates (5-8.5%) UJES has also used crowdfunding for its financing (De Nationale Federatie Stadsgerichte Landbouw, 2013). An initial round of €65,000 in 2012 (NA, 2012) has been followed up with campaigns to support the further development of their operation, e.g. the successful campaign of €92,500 (121 backers) in 2015 to finance solar panels (Uit Je Eigen Stad, 2015) and the upcoming campaign calling for investors (6% return) to realize a satellite location of UJES at Rotterdam Central Station (Uit Je Eigen Stad, 2016). Finally, they operate with a mixture of employees and volunteers.

Some of the revenue streams within the UJES portfolio have failed to succeed such as the chicken and mushroom farming, and others, like the aquaponics unit (combination of fish and vegetables) have proven too expensive to fully kick-start. In early 2016 this part of the business was declared bankrupt (NA, 2016k). The rest of the activities continue.

Discourse: the departing point was argued to be the disconnection between consumer and food. Thus the key driver to initiate the project was to bring food production into the city and closer to the consumer. The approach was to do so by growing eco-friendly products (included here was the aquaponics nutrient cycle) and to create an example of professional urban farming projects that are able to ensure their economic viability (Chin-A-Fo, 2012).

Interaction with institutional settings: the pioneering nature and general directionality of the UJES project has been recognized by city officials (Louwes, 2012) and initial support (e.g. with facilitating a location) showed that such projects are valued in the city. No other form of long-term support or subsidy has been extended and this is also linked to the entrepreneurial nature of the project and the goal of existing as an enterprise that is economically viable.

*De Buytenhof* is a multifunctional farm located in the peri-urban area of Rotterdam (in the southern locality of Rhoon). The farm was turned into social care farm 15 years ago. In addition the farm has orchards (with old apple varieties) nut trees, hay-fields, pastures, fruit and vegetable fields, sheep, cows, and black pied pigs, a farm shop and tea/lunch room run by volunteers.

Initiators/ key actor(s): the farm has been in the hands of the family Van den Hoek since 1896.

Resource/business strategy: the farm has a multi-revenue model: it functions as a mixed farm, a care farm providing services for individuals with intellectual or socio-psychological disabilities; farm shop where fruits, vegetables and meat are sold in addition to processed goods from neighbouring farms and mills; lunch and tea room, also featuring the farm's own products; pick-your-own flower and strawberry fields; workshops on flower arrangements; forgotten vegetables and herb garden. Additional income is attained through donations, these go through the Foundation Buytenhof and are destined both for the general running of the farm and for specific projects such the addition of extra work and lunch rooms. For this project De Buytenhof welcomes financial contributions or donations in kind (building materials and labour). Finally the farm runs with some staff and the support from volunteers (Zorgboerderij De Buytenhof, 2013).

Discourse: the discursive platform for De Buyenhof is to create a caring community (inspired by Christian faith) where nature and animals and the historical legacy of the farm are respected and maintained. Other than the mention about its convenient location (near the city) the farm does not establish specific or special links with Rotterdam.

Interaction with institutional settings: in its role as a care farm, De Buytenhof interacts with the municipalities in order to coordinate the services provided and corresponding compensation. Since the reorganization of care services from the national to the municipal level, discussions have taken place to negotiate the implications of the budget cuts (less service hours and lower rates). In 2014, the municipalities of Barendrecht, Albrandswaard and Ridderkerk together with De Buytenhof and other care service providers signed an agreement where providers accepted a discounted rate but retained a certain degree of flexibility in the allocation of the service hours. The continuation of care services for current customers was also approved. Under this new arrangements municipalities will also have more flexibility in terms of tendering processes (Gemeente Barendrecht, 2014). This illustrates a dynamic environment where De Buytenhof needs to engage in negotiation with changing institutional settings in order to enhance the future of their care service revenue stream.

## Social and Community oriented food gardening

*Voedseltuin* is an urban food garden where organic fruit and vegetables are grown in order to supplement the packages for the clients of the food bank with fresh produce. The garden of almost one hectare is run by volunteers and is located in a vacant lot in the southwest of the city, just a few meters from the food bank. This is mostly an industrial area with several harbours. The garden also works on reintegration and employment for people with distance to the labor market. Additionally, it offers a space for socialization.

Initiators/ key actor(s): the garden was established in 2010 with the initiative of Sjaak Sies (founder of the food bank Rotterdam) and the collaboration of the municipality. The garden association was also a beneficiary of Stichting Doen (NA, 2016l).

Resource/business strategy: the garden functions with only one part time hired staff to provide information, coordination (of the 40+ volunteers) and continuity to the garden. The garden does not receive funding form the municipality and relies almost entirely on donations from individuals and sponsors. The garden is registered as a non-profit public benefit association and donations can be deducted from taxes (NA, 2016m). They are also recipients of the 'we care, we share' charity scheme where customers of a Rotterdam restaurant (Bar & Bistro Bomm) can donate 10% of the tab to the food garden. Currently the garden is running a crowdfunding campaign with a €15.000 goal to create a water collection system in order to ensure sustainable water availability for the garden (NA, 2016e).

Discourse: the motto of the food garden is 'helping people help themselves'. This narrative of supporting the reintegration and general participation of individuals that are for some reason distanced from society and the labor market is really visible in all the activities that are organized by the garden. They conceptualize gardening as an activity that can restore daily rhythm, self-confidence, and general wellbeing in individuals.

Interaction with institutional settings: the garden collaborates with various companies and institutions. Their key collaboration is with the municipality of Rotterdam through several departments; an important partner is the department of social affairs (Maatschappelijke Ontwikkeling), which subsidized the starting up costs in 2011, and is a channel for volunteers who are currently under unemployment benefits schemes. Also, the department of city development (Stadsontwikkeling) and in particular the city ports for making the land available. The department of public works, supplies recycled material for the infrastructure in the garden (NA, 2014).

*Gandhituin* is a neighbourhood garden of 2000 m2 located in the north of Rotterdam. The key focus is on inclusiveness; the garden is open to anyone who wants to participate and the hope is that they reach whoever needs it the most. The participant gardeners (around 20-25) include people who are unemployed (both temporarily or long-term) as well as people with a distance to the labor market (some form of mental or physical disability). The harvest is shared amongst the volunteers. The emphasis on inclusiveness extends to the decision-making; anyone who participates in the garden is also able to join in the process (Vercauteren et al., 2013). The farming style is based on permaculture principles; the area is divided into an edible forest section and the other half is cultivated (NA, 2016i). Finally there is also a community room in the garden where courses (e.g. yoga, meditation, gardening, etc.) are offered; also movies and other activities are carried out there. In the past the garden has supplied food to the local food bank, in the future they hope to be able to dedicate space to the food bank also to reintegration and education projects (NA, 2016a).

Initiators/ key actor(s): the association Vredestuin (Peace Garden) via key actor: Rutger Henneman together with members of the Transition Town Rotterdam.

Resource/business strategy: the soil was suitable for growing as this was already a garden, thus there was no need for an initial investment for setting clean soil onsite. Currently, the garden accepts donations and courses and workshops require the payment of a fee.

Discourse: there is a strong narrative of inclusiveness and the discourse that frames all the activities in the garden is that of the need for an alternative way of living underpinned by values such as fairness, sustainability, and peace. The aim of creating a living space where anyone can have a first-hand experience at what sustainable living is, rests on the principles of permaculture, the philosophy behind Transition Towns and Gandhi's vision of a non-violent and non-exclusive society (NA, 2016a).

Interaction with institutional settings: the garden was developed in 2011 after some school and senior allotments became available (Vercauteren et al., 2013). The Municipality wanted the space to be used for a neighbourhood garden. Members from Transition Town Rotterdam as well as the Vredestuin took this opportunity to develop the project. Further interaction with other institutional actors is not prominent at the moment.

## Short food supply chains UFIs

*The Markthal*, open since 2014, is a covered market with 96 food stalls, 20 units for restaurants and stores, 228 apartments, and 1200 parking spaces. The Markthal is the first of its kind and only in the Netherlands. It is located in the central city area next to the open market (this bi-weekly market with over 400 stalls is one of the biggest open markets in the Netherlands). The Markthal houses also the biggest work of art (11,000 m2), which is entitled the Horn of Plenty and covers the walls and ceiling of the building(NA, 2016h) .

Initiators/ key actor(s): Provast Investors (Den Haag) and MVRDV architects (Rotterdam). The driver was the debate about changes in health and hygiene legislation with regards to covered areas for traditional open meat and fish market stalls. The goal then became to have a covered fresh food market (MVRDV, 2014).

Resource/business strategy: the Markthal is a private venture. The aim is to offer quality programming in the pre-war centre of Rotterdam through a combination of living, food and leisure services and the added amenity of parking (MVRDV, 2014). The intention is to create synergetic possibilities through the integration of these functions. Although no financial results of its performance are publicly available, the market has become one of the top tourist attractions in the city.

Discourse: the Markthal is viewed and framed through different FNS paradigms and actor coalitions and this is visible on debates around the (current vs. expected) role of the market. From its direct investors and developers, the claims on the Markhal revolve around offering an innovative and integrated solution for multifunctional real estate development in the city centre while providing a safe and sustainable alternative to open markets. The Port of Rotterdam has retrospectively taken the Markthal as its icon for its function of providing a face for the agri-food cluster in the region, which happens to be a key global player in food supply chains (Port of Rotterdam, 2014). Finally, actors from the re-localization movement expected the Markthal to enhance or ensure the linkages to farmers around the city, which has not happened. In fact, a group of Markthal stallholders recently filed a complaint to the market owner. They argued that while the market has been a success as a tourist attraction it has failed with regards to its initial goal of being a fresh food covered market for daily shopping. They have formed a lobby group with the intention to advocate for lower rent and service costs. Their prediction is that if the situation is left unaddressed the fresh food vendors will leave and the Markthal will become a big hall of restaurants and prepared food shops (Potters, 2016).

Interaction with institutional settings: actors from the local food movement have argued that perhaps subsidies or financial support is needed in order for fresh local produce to be sold at the Markthal. This has not taken place as the Markthal is a private venture that determines their operating strategy including what is programed on their space and under which conditions.

## Education UFIs

*Hotspot Hutspot* is a social project embodied in a series of pop up restaurants (currently there are four, all in deprived neighbourhoods of Rotterdam. This means low social capital, children in vulnerable health contexts, low employment, etc.). Since 2012, this initiative has worked to help kids and teenagers (from 10 to 15 yrs. old) to get involved in urban agriculture, healthy eating, and cooking. They train kids to cook healthy and low-cost meals for the neighbourhood residents. Hotspot Hutspot also supervises young adults in rehabilitation to learn professional cooking skills (NA, 2016f)

Initiators/ key actor(s): social entrepreneurs. Bob Richters is responsible for the concept, management and long-term strategy. Dorine Rüter works on fundraising, administration, and economic viability.

Resource/business strategy: HH is supported by housing corporations Havensteder, who allows free use of their Schriebroek location, and Vestia who finances the Lombardijen location. Additionally they are beneficiaries of Stichting Doen (DOEN, 2016). They also receive support from the Talentfabriek010, an organization that creates apprenticeships for people with no prior experience; also, they currently provide the required washing, ironing and clothes mending. HH has an online shop where individuals can sponsor different activities related to their daily operation (e.g. the rental payment for one location for a month, an hour of gardening, or administration and organization, a week of fuel for their fleet, Wi-Fi costs, etc.). The business model for HH is still in development, in the words of Richters "we have a very bad income model, we are caught in between because we are neither a small citizens initiative nor a big welfare project with its own funds in the bank " (van der Waals, 2016). In terms of one-time funds HH often participates in awards and competitions. They were one of the top ten finalist in the City of the Future Challenge where the creativity and innovative potential of city projects are rewarded with support for their realization. Although HH is already operational (as opposed to some concept ideas) they entered the competition in order to seize opportunities for new features and locations, also to create a more robust organizational capacity so that they can continue to develop the concept in terms of content, size and location (NA, 2016g). In 2015, they also participated (but did not win) the Paul van Vliet Award (€10,000) granted by UNICEF and the theme park Efteling (NA, 2016d).

Discourse: the key discourse of HH revolves around the empowerment of children to lead healthier and better lives. The assumption is that through experiences of group work, cooking skills, food and social awareness the eating habits of kids (and their relatives) will be changed for the better and the foundation of a positive work ethic will be set. This indirectly expands to their families and the community.

Interaction with institutional settings: HH interacts with a range of social actors and institutions. Often put in the spotlight for its work targeted to the youth (e.g. the visit from Sharon Johnston, wife of the Governor General of Canada to urban food initiatives in Rotterdam). However, these interactions have not translated directly into a more favourable financial framework for the initiative. It is highly dependent on awards and the philanthropy of some organizations and individual patrons.

**Interaction patterns and urban food governance**

After having reviewed key practices of the selected UFIs in Rotterdam, we continue with a discussion on the interaction patterns, resource mobilization, and the implications on urban food governance.

On their editorial 'What role for cities in food policy?' Atkinson and Freudenberg (2015) reflect on this question by looking at what the cities of Cape Town, London, New York and Shanghai have done in the last years in relation to the challenge of creating healthy urban food environments. These cities engage with food policy in different ways, their approaches show that a key factor for putting food on the municipal agenda is the involvement of civil society organizations and social movements. They stress that while sustainability challenges require actions at multiple governance levels; the impact of city food policy is significant. They argue that despite the differences across contexts, it appears that there is a key role for municipal engagement in creating healthy and sustainable food landscapes. Finally, they mention several points of leverage that cities can action in order to further their impact such as food procurement policies, subsidies, taxes, food benefits, educational campaigns, and other food related programs,

If we look at the situation in the last decade in Rotterdam, there are a few things to discuss. In terms of municipal engagement and the development of food policy, it has been a gradual and ad hoc process; the city has reacted to the grassroots interest on urban agriculture and food with support in kind rather than with the allocation of grand budgets (van der Schans, 2015a). Additionally, the temporary nature of political cycles and the impact on agenda setting affect how much resources are spent on food policy.

> *In terms of the Food Council and its role in the city and food systems, I have seen how it is portrayed in research and how people discuss the case of Rotterdam and it's always referred to as if what we see is the result of careful deliberation but the reality is that local governments are ad hoc, or much more ad hoc than it is portrayed to be… an important point is the temporary nature of local governments, much more so than national ones. So every new election represents a new crew and a new start. Priorities change and with this there is a constant 'stop-and-go' phenomenon for different efforts in the city.*
>
> *(Interview Rotterdam, personal communication, 2016)*

There are several reasons why the co-evolution of policy and practice is challenging but a key factor is the compartmentalized approach of municipal governments. Policy areas relevant for a cross-theme topic such as food and urban agriculture (e.g. public space, climate change management, social affairs, health, water and/or green environment, etc.) are all managed by the city separately.

Operating in this environment makes it challenging for UFIs to establish an effective and resilient business model. Some models that have been discussed in relation to urban agriculture in the global north rest on strategies such as: differentiation, that is, offering something that conventional food systems currently do not; diversification of activities; circularity or low cost strategy which implies using underutilized resources from the city in order to save operating costs; co-ownership of the urban farm together with citizens, this can imply active participation of citizens or not; and experience services which mean that the urban farmer provides unique experiences to urban dwellers (Vijn, 2015).

When initiatives seek to move beyond specific and temporary forms of financing (e.g. philanthropic funds, contests, crowdfunding, etc.) towards a model where they secure systematic payment for the societal services they provide, they are faced with the fact that public tendering processes are not designed to include multiple public functions at once. In addition, they are designed to filter out organizations that do not have a long proven record of performance in a specific area and are organizationally too weak or small to comply with accountability processes that come when managing public funds (van der Schans, 2015c). Additionally, and even more critical is the fact that social benefits fail to be financially expressed even if there is evidence to argue for it. To illustrate, social cost-benefit analysis are finding that the benefits produced by community oriented urban agriculture versus the cost are significant; in the specific analysis of the Voedseltuin in Rotterdam the cost benefit ratio is 1:2 (Abma et al., 2013).

For those initiatives who are more market driven, such as the urban farm UJES in this case, the challenge is to find a profitable model that does not only cater to small market niches (low volume of high value food products) but is able to create a solid market base. The study of Angotti (2015) suggests that this is also a challenge in other cities such as New York.

In Rotterdam the Food City Council (FCC) was established in 2014 as a measure to address these challenges. The aim of instituting the council was to highlight and provide continuity to the efforts and networks around urban agriculture, a theme that was an important agenda item during the term of Alexandra van Huffelen as alderman for Sustainable Development, Inner City and Public Spaces between 2010 and 2014. The Food Council is diverse in its configuration and there is room for open debate and interaction. However the Food Council has no programming power as there is no budget assigned to it (van der Schans, 2015c).

There is a role, however that the FCC and other umbrella organizations can and are playing and that is the role of convenors and facilitators.

*In terms of impact, the Food Council could be described as a very light institutionalization of a network approach. If the food movement in Rotterdam would be let alone to develop 'organically' the movement would be fragmented because innovators are very focused on their own domain/initiatives and that implies a more narrow/individualistic perspective. Food City Councils are not policy instruments but rather a sign of a movement. The movement should go on despite of the fact that there is a Food City Council and despite what big food companies think or do. The movement can be dormant if there are no resources or attention but it's not gone.*

*(Interview Rotterdam, personal communication 2016)*

Urban food and agriculture platforms facilitate the distribution of attention and resources amongst initiatives.

*Eetbaar Rotterdam served as a platform and while it was there it was taken for granted but once it was not, everybody was asking for it. One of the aims and contributions of Eetbaar Rotterdam was to distribute the attention and resources to everyone.*

*(Interview Rotterdam, personal communication 2016)*

Interaction amongst initiatives and with institutional settings happens also at the national level. One example is the City Network Urban Agriculture (Stedennetwerk Stadslandbouw), this network of local actors serves as a platform for interaction and collaboration. The aim is to support participants in overcoming shared challenges, draw inspiration, guide policy/lobbying efforts and access opportunities (Stedennetwerk Stadslandbouw, 2015). In 2013 the 'Agenda Urban Agriculture' was launched. It highlighted challenges currently facing urban agriculture: securing space, tailoring hygiene policies, creating better connections for regional food processing and supply chains, professionalizing initiatives and ensuring quality, and linking local initiatives (Stedennetwerk Stadslandbouw, 2013). So far 26 cities and towns in the Netherlands have become signatories. Two studies were conducted to investigate the impact of this agenda both within the municipality and externally (for UA initiatives on the ground). In terms of impact within the municipality the study found out that for most it was a ratification of an already existing priority, for others it indicated a nascent interest and the emergence of more debates about how to approach it. In both cases there were little concrete actions in terms of changes within the municipality or new policies (Veen et al., 2015). The study on the impact the Agenda Urban Agriculture had for UA initiatives located in signatory towns and cities showed that so far the impact has been low. Not all actors involved in UA new about the fact that their city had signed the agenda and of those who knew, the majority agreed that few concrete actions had been taken (Veen & Jansma, 2015).

Another development that can be discussed if we refer to the national level is the emerging interest to connect funding from European rural development measures intended to support short food supply chains to the city initiatives that work on this theme. The rural development measure has been thus far not activated by the Dutch rural governance system and if the needed attention and interest is gathered it

could kick-start a conversation about the redistribution of European (CAP) funds. This development is of interest as it reveals the traditional national priorities regarding food and agricultural developments, namely a general focus on agricultural modernization

Discussing and addressing challenges connected to funding, policy, and cooperation (creating economies of scale, tool sharing, circularity, etc.) continues to be of interests for actors leading and involved in initiatives on the ground. Examples are the Conference for Urban Farmers of Rotterdam (Rotterdamse Stadsboeren Conferentie), which after being organized for the first time in March 2015 had a follow up edition in June that same year (de Graaf, 2015). There is also the Day of Urban Agriculture (Dag van de Stadslandbouw), which is an annual conference that provides space for sharing and debating the advances and challenges for UA not only in the Netherlands but also with an eye for international experiences too (NA, 2016c).

In our study of UFIs in Rotterdam we also encountered initiatives, such as the Markthal, where the theme of fresh quality food brings together two clashing agendas and FNS perspectives. Through the lens of the Food Council and of current fresh produce vendors, there is dissatisfaction about the degree to which the Markthal has created shorter food supplies and better-linked peri-urban agriculture to city consumers. From the Food Cluster perspective, the Markthal aligns well to their agenda of Rotterdam as a global food hub and a key driver of the regional economy.

> *The Markthal is retrospectively taken as the icon of the Food Cluster, even if this two are officially separate. The stories that people from the Food Cluster want the Markthal to be associated with are stories about local honest food, to make the Markthal and the city image more attractive.*
>
> *(Interview Rotterdam, personal communication 2016).*

Rotterdam is indeed a strong logistical node for food in Europe; and not only that; many international food-processing companies are also located in the area. There is an interest from various municipalities in the region to develop additional supporting functions (such as handling, processing, transport to/from the port, etc.) around Barendrecht, an area that has for long specialized in greenhouse growing. This would mean that food would indeed be a key economic driver for Rotterdam but with a strong international orientation.

> *The hope is to develop this land into a huge Food Cluster. This would be part of a larger aim to not only feed traditional markets like Germany but increasingly feed Easter European markets, Russia, the Middle East and China.*
>
> *(Interview Rotterdam, personal communication 2016)*

The Fact Sheet Agenda for the Food Cluster reflects these priorities; some of the items included: participation and performance at the Milano Expo, development of the regional food 'story' in the international stage, and designing a regional vision of future-proof infrastructure logistics using road, rail and water (Gemeente Rotterdam, 2014). These can be argued to be an attempt of the agro-industrial interests to dominate the urban food and agriculture agenda and to put the initial much more alternative urban food movement at a distance.

In recognizing the trajectory of Rotterdam in terms of food initiatives and policy in the last ten years we observe that there is a strong movement and interest in food for which momentum is enhanced when political will and priorities align. Additionally clashing agendas of re-localization and further expansion of the city's role in global supply chains express themselves in sometimes overlapping practices. In terms of future perspectives, capacity to mobilize resources and future viability there are several observations. First, there is interest to integrate the social innovation that happens at the level of neighbourhoods (e.g. community gardens) into the social welfare policy that is, ensuring that the larger organizations that participate in the tendering procedure for managing the social welfare in neighbourhoods allocate funds to the coordination of such initiatives. That way the coordination that is currently operating on a voluntary basis is remunerated. When it comes to incorporating UFIs into housing services and in that way securing

their continuous funding and development, the outlook is mixed. Social housing corporations are currently operating on a financially tight framework, they are focusing on efforts to cut costs; urban agriculture is seen as an extra cost as opposed to an investment. However, when it comes to private housing corporations, there seems to be a more open framework. These actors seem to have recognized the link between quality of life and the surroundings to real state value thus new models where housing, food and green areas are all combined as a new sustainable way of living are being explored. Other potentially interesting avenues could be linking UFIs to health and/or insurance corporations, however here the traditional approach that favours quantitative based evidence of impact is a barrier at the moment.

**Research questions and findings**
When we look at the experience of UFIs in the Netherlands in Rotterdam we observe increased interest and diversity in projects that (re)combine concepts and services in order to support the creation of a healthy and sustainable food landscape. The UFIs we reviewed engage in practices that aim to improve the reconnection of city dwellers with food production and consumption, raise awareness about healthy foods and habits, enhance quality of life in neighbourhoods, create circularity and tap into underused spatial and institutional resources.

With regards to our first research question about the interaction patterns amongst and between initiatives and between initiatives and the wider policy and institutional settings, what we found is that while there is great diversity in UFIs and each has specific foci and revenue model, there is an increasing degree of professionalization and collaboration amongst initiatives. In front running cities like Rotterdam we observe a day-to-day survival/inward focus of UFIs combined with participation in debate spaces; the presence of convening platforms as well as a Food Council have carved a space to discuss issues such as how to achieve 'economies of scale' when it comes to resource/impact opportunities and policy processes. At the national level, there are also coordinating efforts that increase the visibility of urban agriculture and the challenges it faces. Albeit mostly at a discursive level this national coordination has managed to position the agenda or urban agriculture on the priorities of a significant number of cities and towns in the Netherlands.

With regards to our second research question, to what extent are the initiatives successful in terms of resource mobilization? We argue that creating an effective and sustainable business model remains a top challenge for most initiatives. Thus far municipal and national (tendering) arrangements remain hard to access for UFIs, there is no customization for projects or enterprises that while dealing with a cross-theme such as food create public services and value aligned to a range of policy goals. There is increased interest and coordination to ensure the social innovation that emerges at the grassroots level is remunerated and a degree of continuity is guaranteed.

In the metropolitan region of Rotterdam we see expressions of competing and sometimes overlapping agendas. On the one hand there is a strong social movement that seeks to rediscover and revalue local food by both tapping into urban spatial and material resources and also creating stronger linkages with the already existing peri-urban agriculture. The aim is to develop and exploit the potential that exists in the region by weaving the functions of UFIs into several policy goals. In parallel there is a strong orientation towards increasing the role of Rotterdam in increasingly globalized food supply chains by developing the image of Rotterdam as a food hub were fresh and healthy food is abundant and efficiently handled, processed, and distributed. The aim is to create a world-class food hub capable of expanding its activity beyond traditional (European) markets and position Rotterdam and the Netherlands as the top food player in the world.

*Eindhoven*
Eindhoven is a city characterised by many as the previous beating heart of Philips, a multinational technology company, which has infused the city with technology and innovation in all sectors. During the

industrial revolution the city functioned as one of the textile cities as, besides Philips, it also housed many textile industries. These developments in the early 1900s have largely shaped the city, as this attracted a large number of people to the area and consequently a number of smaller towns grew together and became the city Eindhoven (NA., 2016n). This resulted in a city with multiple 'centres' and one that can be divided into districts. Now housing approximately 224.000 people, Eindhoven is the fifth largest city in the Netherlands. Thanks to the arrival of Philips and the textile industries in the early 1900s and the technical university and Brainport more recently (NA., 2016n), around 32% of the inhabitants of Eindhoven are non-Dutch with the majority coming from Turkey, Indonesia, Morocco and Germany (Gemeente Eindhoven, 2016). Although the technology multinational Philips has moved all but its design branch of the company to countries outside the Netherlands, the city has become a hub for technology and design industries and continues to attract businesses and artists. The former Philips production grounds – Strijp-S – that were abandoned for a long time, are now home to artist collectives, UFI's, and designers.

**Governance context**

The number of UA initiatives in Eindhoven has grown significantly in the last years and currently 38 initiatives are active in Eindhoven (NA., 2016o). The UA knowledge platform *Proeftuin040* was founded early 2014 as a response to the mostly individually operating initiatives in the city, emphasising that collaboration efforts and collective learning processes could further a sustainable and green Eindhoven. In December 2014 the in Eindhoven active political party GroenLinks (Green Liberalist) put forth a motion to establish a UA policy after having consulted people from Eindhoven through an open debate (Gemeente Eindhoven, 2014). The motion was accepted by a large majority in the council and the task of formulating a policy was assigned to the earlier established Proeftuin040. The task at hand is to formulate a vision for UA, which is made by citizens of Eindhoven, which the municipality can take up into its policies. Building upon their previously established network of UA initiatives, they started in the summer of 2015 and aim to have a policy by autumn 2016.

**Research questions and findings**

Through the case of Eindhoven we gained first-hand insight into the multi-stakeholder process that takes place prior to an urban food policy. By exploring how in this process different initiatives have merged and developed this provides a better understanding of the stakeholders' reflections and articulations of the role and future prospects of UA in Eindhoven. All data around the case of UA in Eindhoven was collected through workshops that focussed on the policy-making process by Proeftuin040 (see methods p. 8 for an overview of the different workshops). Throughout the policy process, many different stakeholders from Eindhoven were invited to participate in formulating a vision on UA. Sectors represented were amongst others: the municipality, regional government, housing corporations, community centres, social welfare organisations, GGD (regional healthy authority), urban food initiatives, retailers, landscape architects, design studios, and (applied) universities.

When looking at the interactions patterns amongst and between initiatives and between initiatives and the wider institutional settings, we conclude that the UA movement in Eindhoven is still rather fragmented. The diversity in movements around UA is great and they differ in size and scale, revenue model, professionalization and objectives. Amongst the different initiatives there is as of yet little collaboration, however this was also one of the key reasons to develop a policy for UA. As the first workshop initiated by Proeftuin040 proved, amongst all the UA actors there was a demand for a personal introduction to the UA network of Eindhoven, as many had not interacted with the other initiatives. Part of the workshop was eagerly used by the participants to introduce themselves and their initiative and get acquainted to the other UA actors in Eindhoven. However, a large number of the key actors of especially the smaller UA initiatives were already acquainted with one another as they were also involved in other UA initiatives in Eindhoven. Connections between UA initiatives and the institutional setting are still rather undeveloped,

as the network is still in its early stages. However, during many of the workshops possible collaborations, interlinkages and connections were discussed amongst the UA actors and actors from both housing corporations and social welfare organisations. Although the ambitions to collaborate were present, assigning a party that takes responsibility in leading such efforts is still a bridge too far in most cases in Eindhoven. Still, the Proeftuin040 initiated process thus facilitated a much needed interaction space between the many different UA initiatives and other sectors that are interested in UA, such as housing corporations. Within their defined vision they also emphasize the need to facilitate such collaborations as a platform, but also the need for facilitation by the policy levels in making collaborations easier to establish.

In terms of resource mobilization the Eindhoven case is still in a premature stage, as many of the UA initiatives are now transitioning from a state in which they were subsidized or their grant is coming to an end and they now have to come up with more structural resources. One of the prioritized points of Proeftuin040 is to support organisations in those transitions and mostly to learn from each other perils and victories. In general, financial support for UA activities remains largely non-structural – even for Proeftuin040 – and is mostly down to donations, crowd-funding and/or grants that come from the regional level.

All in all there is ample space for UA initiatives to take form in Eindhoven, especially to start up using a temporary subsidy or grant. By tapping into ideas around (urban) design and agriculture, the small-scale, mostly voluntarily-driven UA movement in Eindhoven flourishes, as is particularly visible in the previous Philips area, Strijp-S. However, considering the lack of policy, municipal support and collaboration efforts amongst the initiatives, the movement remains rather fragile and support heavily on a few key actors. The aim of the entire UA policy process by Proeftuin040 is to strengthen the network and create more sustainable and long-term initiatives that contribute to a healthy and green city through its core characteristics of design and technology.

## 2.3. Foresight Workshop

The workshop that took place in the Netherlands was focussed on the case of UA policy making in Eindhoven. The scenarios that were used in this case were chosen by the UA platform Proeftuin040 in terms of what they thought were the most interesting future challenges to discuss. Unlike the other TRANSMANGO workshops, in this case the EU-scenarios were already slightly 'pre-downscaled' to the context of Eindhoven, to save some time.

The three chosen scenarios all have their different opportunities and limitations and work out in a particular way in the Eindhoven region. The following three scenarios featured in the Proeftuin040 scenario workshop.

**'The Grass is greener / From Doom to Bloom'**
In this scenario the majority of Eindhoven's larger industries move facilities abroad towards new economies, as the Western economy has come to a standstill which is making competition fierce. This leads to unemployment on a large scale and emigration of especially the higher educated. Local and national government are short of money and now start receiving aid money from Asia. The lack of money leads to a retreat of the government and disappearance of social security policy. This pushes people to become more reliant upon their direct relations and their own skills. Producing your own food in the city has become a necessity and there is ample opportunity for it, because the 'brain drain' ensured land is plenty available and time is neither a constraint for people. Looking for affordable food, people reconnect to the farmers in the rural and peri-urban areas.

**'Too Busy to Cook / Fata Morgana'**

Eindhoven becomes the city that is known for technique and design. Due to changing EU policies, rather small companies blossom economically as well as politically. Sustainability and local enterprises are the buzzwords of the urban economy. The city attracts many, predominantly young people, who come to form the new middle class: the elite of the future. Their lifestyle is hectic, living in high rise apartments and consuming locally produced, yet unhealthy, food and products. This group of new elite, which is now in majority, determine the direction and values of the local economy. This further unfolds in growing differentiations between 'rich' and 'poor': the poor become marginalised spatially and economically, and public health decreases due to unhealthy food intake. Ultimately, the interpretation of sustainability becomes contested, as there is a proliferation of small, short-sighted projects that do not connect to the vulnerable social groups and have a superficial sense of what is sustainable.

**'Fed up Europe / Green port Eindhoven'**
Eindhoven is envisaged to evolve into a main port of technology and design carried forward by corporate groups and followed by more and more start-ups being incorporated in bigger corporate groups. The *corporatisation* of Eindhoven goes hand in hand with a growing interest in high tech solutions for localised food production in the city; mostly the vertical way. As a result, the rural becomes redefined into a consumption area. Green Port Eindhoven hardly has space for those that have been excluded from the circular economy under construction. The excluded explore for livelihood changes outside the high-tech. New options are identified leading to a greening of Eindhoven, reducing in the long run the differences between the high and low-tech run urban economy. It is in the interest of the municipal polity to underpin legitimacy of it policies to keep these co-existing economies together. Pushing for mutual interaction will reduce the contradictions and enrich the resource base of the urban economy.

## *Workshop Findings*
To structure the summary of findings from the Eindhoven workshop we answer three questions related to the opportunities and limitations for UA in the future (scenarios); also to the translation from this discussion into strategic choices for the initiative; as well as other observations and interesting findings from the reflection process that stakeholders carried during the session.

### What are the most important differences between the 3 EU Scenarios in terms of opportunities and limitations for the 'local' case study initiatives?
The three scenarios paint different realities for UA in Eindhoven. An important aspect around which opportunities and limitations would emerge is the degree to which technology would mediate the development of UA. In all scenarios technological innovation, either its dominance or the reduced presence of it was translated into different opportunities for UA in the city as well as different 'versions' of UA (e.g. low tech vs. high tech based initiatives). A clear illustration is the Greenport Eindhoven scenario interpretation where UA is highly dependent and interlinked with technological innovation and business development.

Another relevant point is that scenarios that were seemingly 'positive' were not interpreted as highly beneficial for the development of UA, while the more 'negative' scenario (From Doom to Bloom) painted a future, according to the participants, where due to the abundance of time and the necessity to rethink (individual) economic prosperity, UA would gain prominence. Although it is important to note that the driver behind this prominence was identify to have been more related to short-term subsistence and wellbeing as opposed to the strengthening of the social fabric or a more integrated sustainability agenda.

A final observation in terms of opportunities and limitations for UA is that the scenario interpretations showed that actors from the urban food movement in Eindhoven implicitly recognize that UA is not a priority for the local government and do not expect UA to become a priority in the future either. Actors' interpretations show that currently UA in Eindhoven consists of a range of initiatives of which most

depend largely on personal commitment and passion, volunteers, and/or temporary project support and the prospects of witnessing structural change in this regard is rather low.

**To what extend are these differences also translated into diverging strategic choices for the future?**

The scenario exercise allowed participants to reflect on strategic choices and/or priorities which will serve as input in order to create a more robust UA vision for the city. The key points that were discussed revolve around:

- Defining a desired symbiotic relationship between UA and technology. From the scenarios where technological innovation is key and a solid relationship between UA and high-tech firms serves as an anchor for UA development to scenarios where the big firms are gone and the local tech expertise is put the to service of low-tech UA in the city.
- Raising interest and building connections to local (large) businesses and to rural movements which so far remains weak/ inexistent.
- Incorporating a sustainable (food) agenda into education, with special emphasis on 'lost' skills such as growing food, harvesting, processing, cooking, etc. as well as circular thinking and strategic use of (re)localized resources and flows.
- Thinking of new revenue models and definitions of economic prosperity that could potentially include alternative forms and means of exchange (e.g. time as money and local food traded through local currency).

**Which kind of other outcomes of the scenario work is important to highlight and understand overall case study initiatives dynamics?**

An initial outcome that speaks of the sense of urgency, relevance, and/or degree of institutionalization of UA is the fact that participants on the workshops were mostly civil actors with relatively few institutional representatives. An exception would be the fact that the last workshop took place at the Regional Headquarter of a large Social Housing Corporation. Hosting such event might be perceived as a positive indicator of, even if gradual, a growing institutional interest in UA prospects and benefits.

In relation to the previous point, the workshops revealed that so far the urban food movement in Eindhoven has not engaged with high-tech firms, small and medium businesses and/or larger enterprises in the region. It is also largely disconnected to rural movements. This is why 'gloom' scenarios where these actors would be less prominent were related to brighter prospects for UA.

The urban food movement in the region of Eindhoven consists of a broad spectrum of UFIs. The movement serves as convening point for people with similar ideas about how UA can contribute to the city's social and environmental quality of life. The multi-workshop approach seems to have contributed positively to the visioning process within the movement. This has also been facilitated by Proeftuin040 and WURs inputs (e.g. the organization of a meeting with some key-experts of Dutch UA movement).

However, the workshops also confirmed that the movement relies heavily on adhoc temporary funding, personal commitment and volunteering. There is little clarity as to what will happen after the UA vision for the city of Eindhoven is finalized this summer (2016). A translation of this document into active and coherent food policy to the city is still to be seen.

A final outcome from the workshops is that while there is a wide range of UFIs working on urban food, the capacity of involved actors to develop a coherent and transparent strategy on how to mobilize support, to create new alliances and partnerships, and to strengthen institutional backup is still rather embryonic.

## 2.4. Reflection on Transformative Capacity

A key lesson learned from the comparison between Eindhoven and Rotterdam is that newly emerging UFI's should not start from scratch. Urban initiatives across the world (Harare, Saigon, Detroit) are critical sources of information to debate at various levels how to materialise urban agriculture. Rotterdam UFI's

have gone through a long phase of establishing, which has been documented in various reports. The actual process of organizing the Proeftuin040 vision when compared to the Rotterdam UFI's is rather fragmented and disconnected from other on-going activities. Proeftuin040 has difficulties establishing their legitimacy vis-à-vis other initiatives in the city. As a key organiser once commented "*we are seen as the new kid on the block".* The scenario workshops further emphasises this point. One of the lessons from Rotterdam is to gradually work from a member-based to a more broad-based, flexible organization that includes other initiatives as well; this would yield more influence and status to Proeftuin040. Proeftuin040's current advantage is that it has been given a clear task by the Eindhoven Municipal Counsel (it has political backing) but community support remains fluctuating and a critical issue.

Both Rotterdam and Eindhoven experience levels of gentrification of the UFI-movement which manifests in its orientation on specific social categories such as the young urban professional. This clearly deserves attention in the near future. A critical trend which tends to emerge is a differentiation of urban farming initiatives in the sense of a High-Tech UA discourse versus a Low-tech UA – permaculture and agro-ecological – discourse. A clear difference pertains to the creation of a new urban landscape. Vertical farming on the one hand and the greening of the urban environment on the other may not be so easy to connect and bridge. This jeopardizes the formulation of common goals and the capacity to bring a range of stakeholders together because of their different values and objectives related to UA.

In table 2 (p. 28) we summarize our key observations and their interpretations in terms of transformative capacity. Our analysis on the transformative potential of UFIs points out that while there is potential in the developments that are currently taking place; UFIs find themselves in very vulnerable positions. This in turn hinders their capacity to further develop their value propositions and address the emerging problems of conventional food systems. Those UFIs that have a stronger market position and future viability are currently engaging with niche food markets, which results in (as of now) very little impact in terms of food and nutrition security of the region.

To further conceptualize our empirical observations in terms of their transformative potential, we draw from the conceptual framework on societal transformation by Avelino et al. (2014), which explores the phenomenon of transformation as the outcome of particular configurations of interaction between different change processes. The authors identify social innovation, system innovation, game-changers and narratives of change as well as societal transformation as different 'shades' of change. In the case of UFIs in Rotterdam we can see how social innovation, which refers to innovative practices or re-assemblages thereof, is emerging through a diversity of urban food related practices that are framed by co-evolving (often competing) FNS discourses. If we then look at markers of systemic innovation we can observe both an increasing emphasis of urban food as a priority and a potential tool to achieve cross-domain policy goals as well as a food policy that is not yet active, coherent, and well institutionalized. We recognize how most of the contemporary trajectory of UFIs in Rotterdam has been shaped by certain game changers, in this case we see how the economic crisis and the increasing trend towards market de-regulation have created a specific context in which urban planning has been articulated (or failed to) as well as where social movements have emerged or re-expressed themselves. Finally, if we look at the narratives of change in this case, we see competing FNS discourses and agendas, which in turn frame UFIs in different ways. We see a strong story line about the city and its port having a role as a global logistical player. As we have discussed earlier the interest and priorities under this agenda differ from the narrative where the city's food system is resilient as a result of the re-localization of key food supply chains and where city sustainability goals and strategies are mediated by its landscape.

The role of the city of Rotterdam when it comes to the transformative potential of UFIs and fruitful urban governance is significant, even though the number and diversity of UFIs in the city has to be credited to the social and entrepreneurial orientation of local actors. And despite the fact that the city has had a reactive and somewhat ad hoc approach to food policy, the historic experience of social innovation and

institutionalization attempts is highly valuable for UFIs across the country that are navigating and trying to create sustainable pathways in urban food governance.

Eindhoven UFM could be characterized as an early life-cycle movement building upon social innovation practices, multiple narratives of change (e.g. sometimes primarily social engineering inspired, other times characterized by a strong belief in high-tech UA futures). This early-life cycle characteristic goes along with little evidence for accompanying systemic innovation and takes place in a wider context of less noticeable substantial game changers. The non-presence of strongly noticeable game changers might partly explain why flourishing UA futures in Eindhoven are primarily associated with darker EU futures scenario.
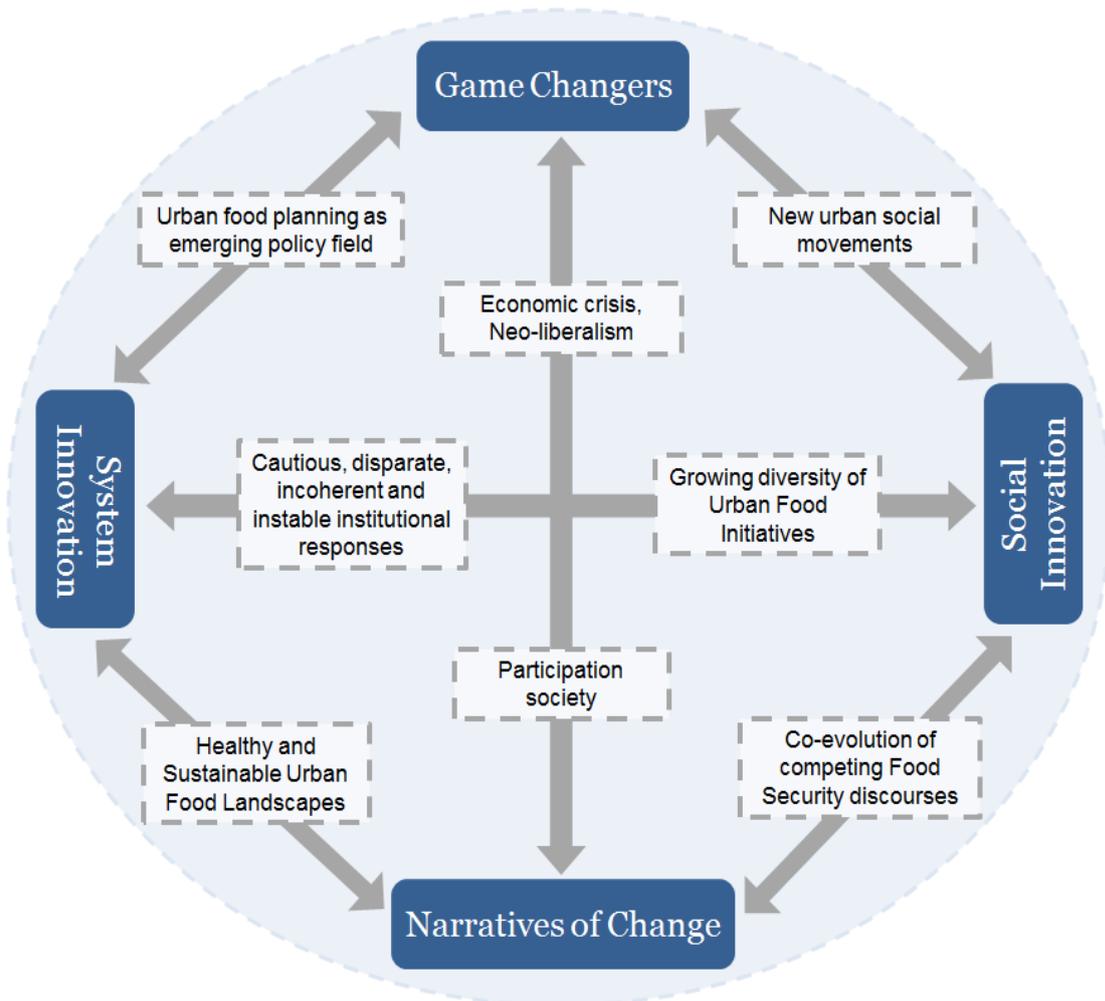


**FIGURE 1 DUTCH URBAN FOOD MOVEMENTS & SOCIETAL TRANSFORMATION**

**TABLE 2 URBAN FOOD INITIATIVES AND DIFFERING LEVELS OF TRANSFORMATIVE CAPACITY**

| Dutch Urban Food Initiatives as reassembled food poverty spaces | |
|---|---|
| **Process interpretations that assume little transformative capacity** | **Process interpretations that assume transformative capacity** |
| UFIs are fragmented and scattered in terms of mutual connections, interrelations and/or collaborative action | Overall patchwork of UFIs embraces a range of disparate ideas while creating spaces for exploring the potential of collaboration for overcoming policy barriers and seize resource/impact opportunities |
| Most initiatives are relatively resource poor, rely on ad hoc financing, and their continuity is uncertain | As a whole these UFIs reflect urban actors' growing commitment to be actively involved in food- and sustainability issues. In parallel municipalities increasingly recognize the need to support UFIs |
| Accessibility of and continuity in land use remains a major barrier, notwithstanding current economic and real estate crisis | Rotterdam's institutional setting experiments with novel interrelations between Urban Spatial Planning and UFIs through public-private partnerships |
| National Austerity Measures and loss of democratic influence at local level undermine the institutional support for UFIs in Rotterdam | There are a growing variety of novel opportunities to interlink UFI with institutional settings (e.g. Food Council, Social ROI index on public tender systems) |
| EU funds remain largely inaccessible for UFI in Rotterdam | A re-distribution of EU funding (e.g. CAP, Rural Development) to the benefit of Urban food actors is increasingly part of Dutch political debate |
| National Social Welfare Austerity Measures reduced Rotterdam's financial resources for Urban Food Initiatives | National decentralisation of the Social Welfare System (WMO), as well as a broader 'urban development' city department might enhance Rotterdam's ability to develop a more integrated urban food policy |
| Rotterdam's food provision system is strongly embedded in global relations and there is a strong 'global food' economic agenda connected to the city's port and industrial peri-urban agriculture | UFI are increasingly embraced as instruments to maintain regional food chains and re-create social cohesion in these multi-cultural urban spaces |

## 3. DUTCH FOOD BANKS

Another element of FNS is the distribution of food entitlements (Sen, 1987), even when food is available in abundance. Contrary to the case of the urban food initiatives, which focus on creating self-reliance in food entitlements, the Dutch food banks focussed more on vulnerabilities by (re)distributing food. Moreover, the diversity in practices within the Dutch food banks can demonstrate the complex and multi-layered nature of societal innovation and transformation (Avelino et al., 2014) differently.

### 3.1. Research questions & Methods

In this report a guiding set of broader research questions led to eventual more case-specific research questions. The purpose of the overall D6.1 research questions is exploring the transformative capacity of FNS practices. When down-scaling these questions to the case of the food bank – after an initial explorative research on food banks in the Netherlands – the result is the following set of questions:

1. How to characterize current FNS practices of Dutch Food banks?
2. What are future plans of Dutch Food banks?
3. How do Dutch Food banks interact with institutional settings?
4. Do Dutch Food Bank practices have transformative capacity?

To answer these research questions we explored the National Association of Food banks (the VNV) and 2 distinct local food banks, located in Wageningen and Eindhoven. Moreover we investigated urban food initiatives that connected to a food bank and in particular focussed on the Stadsakkers, located in Eindhoven. The choice for these particular cases was made since access had already been established to the sites. Within these sites we looked at the type of narratives that are constructed around the topic of FNS, poverty and the role of the food bank.

A variety of methods were used in the case of the food bank in order to explore potential transition pathways and on the other hand transformative capacity. A document review which included primary and secondary data was done. Additionally a media analysis was also conducted. The primary document sources were reports and publications by the organisations. The review of secondary data was based on academic literature on food banks and food poverty, reports by organisations/institutions other than the food bank, and policy documents. The media analysis focussed mostly on newspapers, but also video reports and social media.

Secondly, interviews were an important source for 'thick description' (Ponterotto, 2006) in this case-study. We conducted a total of 16 semi-structured qualitative interviews with representatives of National Association of Dutch Food Banks, local Food Banks initiators and Social Workers. Moreover, Wageningen University Master students, were involved in the interviewing and participatory observation of food bank clients[2]. The interviews were recorded, transcribed and coded. In all the interviews the distinction between different practices within the food bank were coded. These codes related to the practices around food sourcing; the internal organisation of the food bank; the construction of poverty; interaction with the institutional setting; and new collaborations/arrangements. The goal was to understand the narrative around the FNS practices from within through these interviews: how the actors make sense of the problem and construct assemblages of practices in order to change FNS.

Participant observation was used to get a deep understanding of the context. This included site-visits and participation in meetings. Also short conversations or informal interviews belong to this category. These methods lead to thick descriptions that allow us as researchers, but also readers of this report to 'place themselves within the research context' (Ponterotto, 2006). By applying this multi-method approach the

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[2] Local food banks understandably restrict outsiders' access to research clients and their experiences. Consequently, the interviews taken were only conducted when clients themselves came forward to participate and thus give a skewed presentation of the clients of the food bank.

data could be triangulated in order to unfold how assembled FNS practices of Dutch Food Banks actors indeed contribute (or not) to societal transformation.

## 3.2. Research findings

### *Literature review*

Even though there is an abundance of good food in the West, the problem of hunger is tackled by food banks in many of the world's rich industrialised countries (Riches and Silvasti, 2014). Issues of food deprivation were not recognized until the 1980s and 1990s (Tarasuk and Eakin, 2003) and this 'paradox of want amidst plenty' struck mostly the poor faced with problems like unemployment and low wages that coincide with "changing economic conditions and the [inadequacy] of welfare programmes" (Riches, 1997:67). The world's first food banks were formed in the US and aimed to provide the hungry with temporary emergency relief. Approximately 20 years later the food bank has taken up a more prominent role in the system of emergency food-aid (Warshawsky, 2010) and has transitioned "from 'emergency' to 'industry'" (Booth and Whelan, 2014:1396). Now targeting a different group than 20 years ago, food banks are faced with the challenge of the "new poor" (Dowler and O'Connor, 2012:9). The "new poor" refer to a group of people emerging out of the economic crisis and its widening effect on inequalities. These groups are facing food poverty and the question is if food banks are fit for the job.

Set in motion by severe cuts in the 'tax-funded social policy' made on 'neo-liberal agendas', social safety nets became more reliant on the presence of the food bank. "In the 1980s and 1990s this has fallen off political agendas as a result of market-based welfare reforms and campaigns of disentitlement. Welfare rolls were cut, eliminating those out of work or unable to train" (Riches, 2011:770). Two decades later, the welfare reforms are still ongoing and many states continue to slowly distance themselves from the notion of the welfare state. Although there might not be a consensus whether the food banks are the cure or the disease, there is consensus about the processes of neo-liberal reform leading to the institutionalisation of the food banks (See e.g. Booth and Whelan, 2014; González-Torre and Coque, 2015; Kim, 2015; Wells and Caraher, 2014).

The differences of opinion can be found in how these processes of neo-liberal reform have unfolded in relation to the state. On the one hand it can be seen as an 'extension of the welfare state', while a large group of critics describe it as 'a failure of the state' (Livingstone, 2015). In the sense of the first, the state has delegated responsibilities around welfare to the market, and the food bank is a very successful result of this reform (See e.g. Kim, 2015; Santini and Cavicchi, 2014). By redistributing surplus foods, food waste is reduced considerably. This to the content of the agro-food industry that now has an outlet source that reduces costs and can be penned down as corporate social responsibility (Elmes et al., 2015).

Other authors propose that the increasing importance and number of food banks is a sign of failure of the state (See e.g. Booth and Whelan, 2014; Lang and Barling, 2012; Livingstone, 2015; Warshawsky, 2010; Wells and Caraher, 2014) and is not a FNS pathway worth continuing along. As Livingstone demonstrates in the case of the UK, governments "dismiss connections between hunger and reforms" (2015:2). Governments that refuse to acknowledge the connection between the reforms and poverty levels are not fulfilling their responsibilities to their citizens (McIntyre et al., 2015). Authors are concerned with this now normalised response by charity to problems of food poverty. They argue that this is actually not the construction, but the "breakdown of the social safety net" (Riches, 2002:648). This legitimizes the government to look away and de-politicises hunger by having charities 'solve' the issue.

As the literature portrays, the position of the food bank in the food system is a contested one. As such, we take lessons from in the literature described case-studies done in similar rich, industrialised contexts. However, given the vast number of food banks all over the world, we need to contextualise the practices and position of food banks on a local level, meaning in this case the Netherlands. Governance of a food bank is shaped by the actors, networks and institutions that are present in a certain context that has its

own specific cultural, economic, social and political vectors (Kim, 2015). As such, the impact of the food bank on issues of food poverty may rely on many factors, such as size of the backgrounds, intentions and specific operations of local food bank initiators and leaders (González-Torre and Coque, 2015).

### *FNS practices of the food bank in the Netherlands*

The food bank is a national association that operates in many localities, with a separate governance structure in many of those localities. The practices they perform are geared toward addressing issues of poverty and FNS in vulnerable groups. Amongst the many practices they perform we regard the following as being the most notable in addressing FNS: food sourcing; internal organisation; framing and operationalizing poverty; interaction with wider institutional settings; and complementary FNS collaborations/ arrangements. In the following section we will explore these different practices in depth, interrogating their efforts and claims. As these may differ substantially and serve different purposes, we will make a distinction between the national level and the local level in the presentation of our principle findings.

### National food bank practices

#### Internal organisation

The first food bank in the Netherlands was founded in 2002. Considering the international spread and importance of food banks in food security matters at that time, this was relatively late. In 2001, a Dutch couple living in Rotterdam decided to start a food assistance project for a small group of people in their area that were experiencing financial trouble. Inspired by the Food Bank that started in Belgium in 1994, they started as a small scale operation from their house. Driven partly by their Christian faith as well as the urge to give something back to the community, in return for the social welfare they received after their local shop ran out of business.

> *In the Netherlands we had built a social system that made everybody think: 'everybody can purchase food, so direct food aid is not necessary, as it was formerly'. The second big development, which runs parallel to that, is the secularization and separation of church and state. Because of this, help in kind disappeared. These two developments caused a 'gap in the market'. Apparently there were still people suffering from hunger, reasonably invisible to the eye of the general public. Out of this observation the first food bank was started, on a very small scale.*
>
> *(VNV, Personal communication, 2015)*

They went on to found a national foundation of food banks, the SVN (Stichting Voedselbanken Nederland) and called upon others in the Netherlands to follow their example. In the following years food banks sprout from the ground and five years later already 77 food banks joined forces. In 2009 the economic recession also hit the food banks, as most of their usual suppliers now held on to their stock and only donated their surplus foods right before the expiration date. Meanwhile the number of families receiving food assistance grew. A retrospective analysis of the happenings during that time of recession and reduced amount of incoming food made the SVN draw the conclusion that "direct democracy" was needed (VNV, Personal communication, 2015). This meant using a structure that bypassed the regional administration and all local food banks were in direct contact with the national board. In May 2013 this led to the abolition of the SVN and the foundation of the VNV (Association of Dutch Food Banks).

> *Transparency is extremely important. [For example], we currently work with 8 distribution centres … and the idea is that they will use the same logistical system. But we are not there yet! So now we have laid out a course that will involve the boards of these distributions centres to pin down what functions should be prioritized. This to make sure that they will commit themselves to this system; we are not going to force it on them! So yes, we want one system and them to commit to it, but which system? Well, that is something for them to decide. Of course we guide them… But it has to do with support. When we will force things, which we tried before, only half of them committed. This has to do with the different cultures amongst the food banks.*
>
> *(VNV, Personal communication, 2015)*

Now local food banks are in direct contact with the national organisation and board (VNV, 2015a). 154 food banks were registered to the VNV in 2014 distributing food aid through 475 distribution points spread over the Netherlands (VNV, 2015b). In 2015, the numbers were still increasing and the VNV accounts for 160 food banks and 510 distribution points. As the VNV acts as an umbrella-organisation, they can deal with processes that are relevant to all food banks such as institutional connections and food sourcing and herewith often relieve local food banks of workload. The structure of the VNV is highly professional, as most of the volunteers working at the VNV are pensioned professionals. They have taken the professional work-ethic from their previous job to the VNV to ensure efficiency. One of the future aims of the VNV is to professionalize even further and create more efficiency, focussing on finding skilled volunteers, food sourcing and food safety.

> *Within the VNV we have several portfolios: logistics, fund-raising, food safety, you name it. Every board member is responsible for building such a specific portfolio. … That is how we have organised the VNV and the special thing about these coordinators … they don't see each other daily, so they need to be able to work fairly autonomously, but they also need to guard what we do collectively.*
>
> *(VNV, personal communication, 2015)*

Within the VNV they are also trying to professionalize more when it comes to the food bank operations. In this they are trying to persuade the local food banks to change some of their practices, which sometimes create tension with regard to the needs and resources of the local food banks.

> *I think we should professionalize more and rationally everyone agrees with me… But all those little kingdoms of which some do not even know how to write professionally… How can you sufficiently manage that? Yes, well… it is a process we are going through.*
>
> *(VNV, personal communication, 2015)*

All-in all the VNV serves as an umbrella organisation that aims to take more general tasks out the hands of local food banks and in that sense contributes to the two main objectives of the VNV: offering direct food aid to the most needy, and 'preventing wastage of good food' (voedselbankennederland.nl). In this they recognize the need to keep their regulations open for local interpretations, so that all the different food bank "cultures" can work with it, given their particular needs, challenges and available resources. Once a year, the VNV requests 'basic data' from all the local food banks. However this does not give them an exact image of what is going on at the local level, as some local food banks do not have the resources to keep up their administration.

Problematic in the structure of the food bank is their reliance on volunteers. Although the national association of food banks effectively attracts highly qualified professionals, they fully rely on people that want to do this work voluntarily. One of their main issues is finding people that are qualified to take up such a portfolio in the board of the VNV and can also do this quite autonomously.

Other obstacles for the food bank are rules and regulations that apply to them. The food bank might have grown to be such a large, institutionalized, organisation, in some more technocratic ways they are not considered as such, which proves to be difficult for a charity organisation:

> *Something that is hampering us for example, is the tax on cars (BPM). If we buy a van for the food bank, we are treated as a private individual. … Technically I understand the problem, but I just don't want to understand it. I mean, we are a food bank! …we are not a company, because we don't make profit. But why should we pay that extra tax, that is nonsense right?*
>
> *(VNV, personal communication, 2015)*

The internal organisation of the food bank has gone through a number of changes in the last years differing mostly in the position of the national umbrella organisation. After the economic crisis the members decided for a more 'democratic' structure, which means all members have a say in the governance of the food bank.

## Framing and operationalizing poverty

In order to target the most needy, the food bank sets an admission threshold. To standardize the admission to the food bank for all membered food banks of the VNV the regulation is set by the VNV. As of July 2015 the members of the VNV voted to change the admission criteria during a general meeting which affected the threshold for a household's 'leefgeld'[3] in order to appeal for a food package. Consequently, a further increase of food assistance by the food bank is to be expected in the coming year, despite the levelling off of the percentage of households with a low income (see figure **2** in the Annexes). Food banks in the Netherlands have reached approximately 37 thousand Dutch households (equal to 94 thousand people) in 2014.
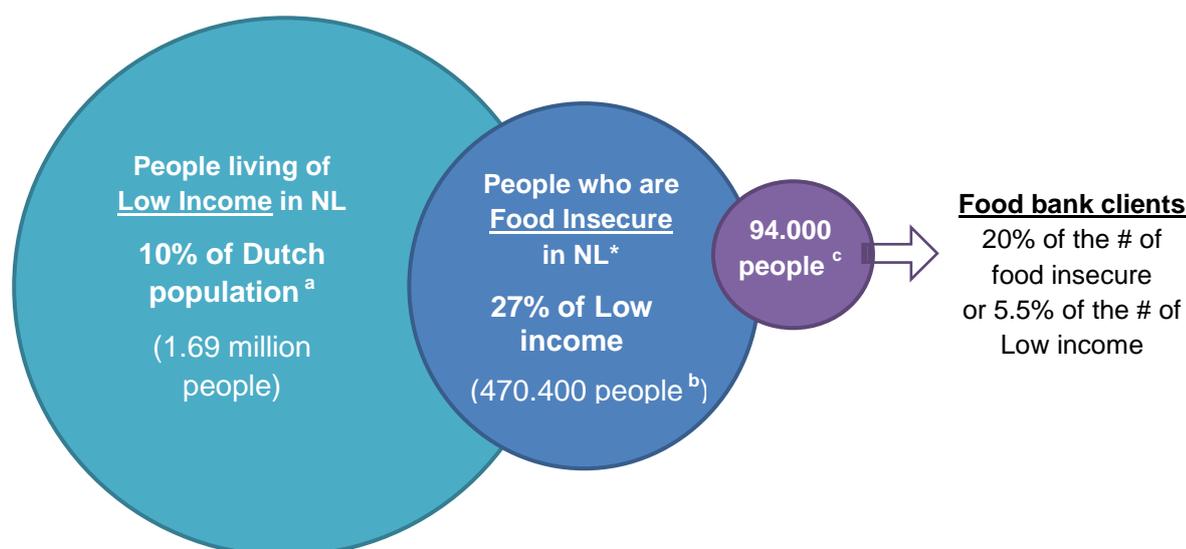


**FIGURE 2 NUMBER OF POOR, FOOD INSECURE AND FOOD BANK CLIENTS IN THE NETHERLANDS IN 2014 (SOURCE: [b] EUROSTAT (2015); [a] SCP and CBS (2014); [c] VNV (2015a))**

Comparing this to the number of Dutch households that have a low income, only a minor percentage (5.5%) of this low income population is reached. Although it cannot be assumed that all households with low income are food insecure (Loopstra and Tarasuk, 2015), it is safe to make the assumption that there are more households that are currently not reached by the food bank (see figure 1), as according to Eurostat (2015) an estimated 27% of the low income population in the Netherlands as food insecure. Combining this insight to the changed admission rules is a cause for concern for the VNV and they especially wonder how local food banks are going to deal with this increased workload.

*People [of the local food banks] are primarily focussed of the problems of today. For example, food banks tell us that they have trouble with accommodation and are proud as a peacock when they have succeeded in finding new accommodation via the municipality. But when we ask: 'Congratulations! But how much do you expect to grow?' …nobody has thought about that! In other words, I expect the size of clients to double or even triple and I don't think the food banking world is prepared for that.*

*(VNV, Personal communication, 2015)*

At the same time the VNV is very aware that handing out surplus food to the food insecure is not a long term solution and being able to reach more people is not the answer to this problem.

*A professional social worker must always be involved in the admission process, this one of our regulations. The underlying thought is that the distribution of a food package is just treating the symptoms, it is not a solution.*

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[3] For a household to appeal for food assistance from the VNV households needs to have less than a certain amount of *leefgeld* (household allowance). This is the amount of money a household has left to spend after deducting all the fixed costs such as housing costs, electricity, etc. A household can appeal for a food package once a household has less *leefgeld* than the amount specified for the composition of the household. E.g. for a household with a single adult and one child this amount is €250,-.

*Because there is a professional social worker involved, you can reasonably assume that they will look in a broader sense to what are the problems in that household and that they will eventually tackle that. Because the only thing that the food bank does, is provide food aid. And that is a fact.*

*(VNV, Personal communication, 2015)*

The assumption of the VNV is that through the food bank the connection to other societal sub-systems such as social welfare is enhanced, which indirectly increases the impact of the food bank. For many of the poor there are still obstacles to use these societal sub-systems, due to the time one needs to invest or to stigma around being poor.

The VNV is attempting to combat the latter stereotypical idea by having former food bank clients tell their story and by publishing 'Fact or Fable's[4] on their social media. Although mostly through social media and television shows[5], the VNV is engaged in making the food bank clients more visible to the general public. These types of messages do focus in a more positive sense on the clients of the food bank and try to combat stigma around going to the food bank. In the Netherlands this is a major part of the advocacy around the food insecure, no other parties have actively and for a longer period of time advocated for the food insecure. Problematic in this lack of debate around food insecurity in the Netherlands is that the issue is marginalized and hardly reaches policy levels.

### Interaction with institutional setting

One of the main tasks of the VNV is to interact with the government and larger food industries on behalf of all the local food banks. On EU-level the VNV is also connected to the European Federation of Food Banks (FEBA) where they collectively try to push the food banks' agenda. Interestingly, one of the main points of the VNV is that they stay 'a-political' in this process.

*As a food bank we don't have an opinion on [policy]. ... We are neutral. If the government feels that they, for whatever reason, have to retreat and leave things to the market, then that is a political discussion and those are political choices. As a food bank we don't have an opinion. We just make an observation.*

*(VNV, Personal Communication, 2015)*

Since 1991 the Dutch government has not been in favor of policy that supports direct food aid or help in kind (Timmermans, 2012). Official statements made by the current cabinet emphasise their non-advocacy of direct food assistance. Instead social policies that combat poverty and social inclusion are high on the political agenda.

*[The government] told [us]: 'Direct food aid does not exist in the Netherlands and as a government we will certainly not participate in it. … It is a private initiative. It's great that you are doing it, but we will not meddle with it.' That was made quite clear to us.*

*(VNV, Personal communication, 2015)*

As the type of aid the food bank provides is not supported by any social policy or on the political agenda, they receive no financial or structural help. The VNV feel like staying 'behind the scenes' brings about more change than for example asking questions in the Second Chamber or joining a public debate on food insecurity.

*We bring matters under discussion by deliberating through different channels. We maintain our contacts with the private sector; we keep in touch with members of the government and the officials surrounding them. By doing exactly that, we prevent being pulled into public and political debates.*

*(VNV, Personal Communication, 2015)*

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[4] A recent 'Fact or fable?' by the VNV pointed out that it is a fable that being a client at the food bank is "your own fault". They emphasise that the last few years have shown that it can happen to everyone. The new poor in the Netherlands are also freelancers, entrepreneurs and people with a job.

[5] The VNV also collaborated in making a reality TV-show called '*Effe geen cent te makken*', which featured a popular Dutch folk singer and his family who tried to live on a low income and a food package from the food bank. This folk singer is now an ambassador of the Association of Dutch Food banks.

Being 'a-political', they try to remain behind the scenes by lobbying and primarily talking to individuals at the government away from the public eye, which also arguably keeps food insecurity off the political and public agenda and therefore invisible.

Although at the national level the Dutch government does not support the Food Banks financially on a structural basis, in 2014 a subsidy of €350,000 was given to start a pilot project to develop healthy and full soup-meals of surplus food that can be frozen and distributed through the food bank. This subsidy was established after the Minister agreed to finance projects that speed up collaboration between of the Alliance of Sustainable Food (AVV) and the Food Banks and their results (Klijnsma, 2014). This was done in an attempt to lower food waste and at the same time aid the food banks that have taken up an indispensable role in poverty management. However, as the board member of the VNV says, the relation between the state and the VNV is of high importance to these types of decisions:

*We find much support in particular people in the private sector and particular [State Secretaries]: they are genuinely looking at whether they can support us in any way. So it is not about the effort! … [Take] the soup-project for example … and the legislation around labelling of food products. … The Ministry and private sector are really thinking along with us: 'How can we help you in the sense that you meet criteria, but that it also creates a smooth process?' It is just an example, of course. But at the moment the relationship we have with the individuals within the Ministry is fantastic.*

*(VNV, Personal communication, 2015)*

As the board member emphasises, the relationship with individuals within the ministry is very effective, however this can also be regarded as a vulnerability since the working relationship depends entirely on a few individuals that may or may not be there in the years to come.

On European level, the FEBA acts similarly to the VNV but on a larger scale, as the board member recounts about lobbying on labelling regulations:

*We [the FEBA] were on top of that! It had serious consequences, so we just started lobbying. We were talking to members of the European Parliament and European officials… in the interest of the food bank.*

*(VNV, Personal Communication, 2015)*

However, in most cases what happens at EU-level is not relevant to the VNV, although they are aware that Dutch regulation is also guided by EU policy.

*Brussels is very far away, even though we know that these kind of [labelling] regulation matters are raised in Brussels. But yes, in the end we deal with the Dutch situation… Even though that is a derivative of Brussels.*

*(VNV, Personal Communication, 2015)*

Dealing with the national government is one of the main tasks of the VNV which proves to be quite efficient, as it saves local food banks a lot of time. Visa versa it provides the government with one contact point and can easily communicate with the Dutch food banks through the VNV. But also when it comes to the food industry, the VNV assures a more efficient and professional relationship (see food sourcing). In their role as mediator they aim to handle things professionally and stay 'a-political' by trying to keep matters relevant to the food bank out of political discussions.

### Food sourcing

Similar to the interaction with the government, the VNV has a prime role in establishing stable working relations with actors in the food industry. Now that the VNV has taken up this responsibility more foods are coming in, as the effectiveness has increased for food industries since they can now talk about larger loads of a product. Before, according to local food bank leaders, the division of donated foods was unfair and inefficient as it was mostly connected to the geographical location of a food bank.

*"Now things run much more streamlined. Before, everybody had their own kingdom. Now the VNV is taking care of sourcing food from the national players, it can be much fairer. Before food would 'stick' to certain regions where they might not even have needed it so badly.*

*(Eindhoven food bank, Personal communication 2015)*

Business-partner agreements are slowly becoming more important with regards to the amount of food sourced by the food bank, but also the diversity of foods coming in. This contributes strongly to one of the VNV's two main objectives to reduce the amount of food waste in the Netherlands. For example, thanks to a recent deal with a large nationally operating cooperative dairy processor, dairy products can now be guaranteed to be in the food packages.

*We now have a business-partner agreement with Unilever and one with Friesland Campina. More of those agreements will follow soon and those sorts of deals really have substance!*

*(VNV, Personal communication, 2015)*

What is central in these agreements according to the VNV is the creation of a win-win situation for both the food bank and the company in question.

*We always assume that if we do not succeed in creating a win-win situation, it will always be temporary. Starting from a win-win position you can establish structural relationships.*

*(VNV, Personal communication, 2015)*

Recently, the VNV have been working on improving this win-win situation, by deciding to get all food banks certified on food safety, which is aimed at reducing barriers for food industries to donate food, but also supports them in reducing food waste.

*That push towards [food safety] certification is coming from us. We, as food banks, have to be able to show more and more that we can handle products properly. ... We had the members of the VNV decide for themselves to move towards getting this certification. Certification was not a demand from the corporate world, however they it was always an insistent question of 'How can we be sure that you treat our products decently?' So there was some pressure from the suppliers, absolutely.*

*(VNV, Personal Communication, 2015)*

As most of the donated food is somehow damaged and is not fit for sale, companies want a reassurance that foods are treated properly, so their brand name is not affected if there is a food safety health risk. By making sure all food banks are certified when it comes to food safety, the responsibility for food safety is then transferred to the food banks.

Other, already existing, advantages for companies in donating foods are the fiscal advantage they receive, save costs for the landfill, and improve their name as they connect it to charity. According to an entrepreneur that started a business in turning food waste into others foods that can be sold in the supermarket, thinks this relation is unfair and promotes unsustainable resource use.

*You get a fiscal advantage when you donate food, so you are rewarded for the mistakes you made. … No, I find that that wrong. That should be the risk of having a business. I think that you should get fiscal advantage for being innovative.*

*(Food2food, Personal Communication, 2015)*

Another development is that the market of previous-food-waste products is growing and more and more companies put emphasis on making their production line more sustainable and resource efficient. These developments in the food sector will eventually put the food sourcing scheme of the food bank under pressure, as they both rely on food waste.

*We expect an enormous growth [in clients]. It is just that our bottleneck, or at least our primary one, is the amount of food.*

*(VNV, Personal communication, 2015)*

As the amount of sourced food is already insufficient and the amount of clients is expected to grow, these sustainability efforts in the food industry could turn out to be problematic for the amount of food the VNV can source. In that vein, the VNV has been involved in setting up new collaboration-efforts to stabilize food supply in expectation of an increase in clients.

### New collaborations

With some financial help from the government new projects are developed to turn food waste into a valued product which can be distributed by the food bank. Especially when it comes to seasonal vegetables, the distribution centres of the VNV sometimes receive extremely large amounts of food that they cannot handle or distribute in time before they are wasted. The Soup project was an attempt to turn these resources into something that lasts and is still high in nutrients.

> *The main argument for this pilot was the observation that there was a lot of good food, a lot of fresh food that was too much for the food bank to be able to cope with it.*
>
> *(VNV, Personal Communication, 2015)*

Besides input from the government, in the form of a single donation, the food bank also put some money into this pilot project.

> *The Soupalicious project ... is supported by us in the sense of assisting. But those are just external workers. And yes, we have helped through a bit of subsidy to see if we could get this going, because that is in our interest. But we are not going to produce anything.*
>
> *(VNV, Personal Communication, 2015)*

Also other food waste channels are targeted in pilot programs, such as food waste from the catering industry.

> *We are also working on a pilot project with meals from a catering company. At the end of the day there are left-over products in their kitchen that will be thrown away. What we are doing now in that pilot, is exploring if the chef can still cook something with the left-overs at the end of the day and then freeze them.*
>
> *(VNV, Personal Communication, 2015)*

However, these pilots are complicated by labelling regulations, as this is required on any packaged foods that are distributed or sold. The soup project can abide by these rules as they create a larger volume of soups of a pre-considered recipe, while left-over food meal production is bound to be differing in ingredients and proportions. All in all, these projects can only supply a relatively small volume of foods and cannot supply all food banks with sufficient amounts of food. Also, after the pilot phase, most of these projects turn into for-profit-ventures, which makes them unfit for collaboration with the food bank.

The VNV complements the practices of the members of the VNV by approaching matters from a national scale. However, what is typical in this case is that there is no hierarchy in positions assumed, which are the VNV's attempts to make the governance of the organisation more democratic at the national level. Functioning as an umbrella organisation, they support their members, but are also driven by the needs of their members. From a national point of view they deal with matter such as internal regulations, communication with the government and handling of food sourcing on a large scale. In the following section we will focus on the practices of the local food bank.

**Local food bank practices**

**Internal organisation**

The governance of the food bank at the local level depends completely upon the board members of the local food banks, in extent: the local food bank leaders and the opportunities they see, the challenges they face and the resources they have. The VNV recognizes somewhat that they have to provide space for the local level to place national regulations within their context. The dynamics between the VNV and the majority of the locally based membered food banks are good, although some membered food banks are a little more "stubborn" or perform alternative practices. In general, the relation between the VNV and the local food banks is valued as the membered food banks acknowledge they profit from this dynamic.

*Nationwide you're just stronger when you're together. But we also have an excellent board that communicates well with the government and the industry. We restrict ourselves to the region, communicating with the municipality and such.*

*(Wageningen food bank, personal communication, 2015)*

*Eindhoven is also member of the VNV, who deal with bigger players. This comes in handy, because now the food bank in Eindhoven can focus on stuff locally. This is much more efficient and food is also divided fairly.*

*(Eindhoven food bank, personal communication 2015)*

This allows the local food bank to dedicate their time to dealing with local issues that they face, like dealing with day to day logistics in the food bank of preparing the food packages and taking care of scheduling of volunteers.

*On Monday, Wednesday and Friday there is work to do. Then the people who pick up the food, sort the food and put some of it in the freezer or fridge are here. On Friday morning we finish filling the crates that were partly filled with the non-perishables on Wednesday and on Friday afternoon we hand them out. So you need people to work here on three mornings when the products arrive and you also need people that can sort of judge the best-before date and quality.*

*(Wageningen food bank, personal communication, 2015)*

*If you look at our timetable [in which we schedule the volunteers], you can already see how complicated it is. … But in general we have enough volunteers offering to help.*

*(Wageningen food bank, personal communication, 2015)*

The number of volunteers is not a problem for most local food banks. Some local food banks had to start waiting lists for people who offered to volunteer at the food bank. However, they are still dependent on volunteers to do the work. To ensure the stability of their workforce some food banks find themselves forced to work with a large number of volunteers for fewer hours.

*People have to be available twice a month for one shift. Because if, in the extreme case, someone works five days a week and falls ill, you have a big issue. This makes you vulnerable. That's why we've put a maximum to [the amount of hours worked].*

*(Wageningen food bank, personal communication 2015)*

The locally based food banks also attract highly qualified professionals that can put their skills to good use by being in the board of a local food bank. Often this starts after people start working towards their retirement and find themselves with time on their hands. A board member of the Wageningen food bank recounts why she started working at the food bank:

*At the time I was still director of a [plant-research facility]... And I started wondering about poverty in this area. This problem kept me busy when I started working less hours. After having worked on a national level for a long time, I wanted to return to the local level.*

*(Wageningen food bank, personal communication 2015)*

Concerning the internal organisation, the major tasks of locally-based food banks are centred on getting the work schedule in order and getting sufficient and qualified personnel. The number of volunteers is

generally not a problem; however people that want and are qualified to occupy a board function are scarcer.

### Framing and operationalizing poverty

Admission criteria are set through deliberation amongst all members of the VNV. The regulations around admission are kept open to flexible interpretation so food banks can adjust the admission process according the resources at hand. This is reflected in the extent the social worker is involved in the process; some food banks only have people referred to them with a document signed by the social worker after which they check the amount of 'leefgeld'. While other food banks have social workers present in the food bank and demand a larger amount of input by the prospective client.

The food bank in Wageningen uses a referral system and remains in contact with social workers. The food bank in Eindhoven goes a little further than that: Admission to the food bank is firstly by referral from social welfare, municipality, debt counsellor, church, and etcetera. After a sort of credit check, the food bank can still ask the prospective-client to take measures to save money.

> *For example if they have a car, we will ask: 'Why do you need that car?' If they don't need it, for example to keep their employment, we don't count those costs as 'fixed costs'. Because there are a lot of fixed costs attached to having a car. Of course they can keep the car, but that is their choice! But it can mean that you miss out on a food package.*
>
> *(Eindhoven food bank, Personal Communication, 2015)*

In Wageningen they see this type of measures as outside of the food bank's responsibilities. They emphasise that most people that are in a situation in which they need the food bank are already stigmatized and they aim to offer a non-judgemental helping hand.

> *The preceding trajectory is not of our concern. We don't judge. If the client arrives with a car or with a shopping cart... It doesn't bother us. Sometimes we have to remind the volunteers of this. A volunteer will say: 'I saw one of our clients the other day buying two crates of beer in the supermarket!' My response to that is: 'Well, it is not our job to judge.'*
>
> *(Wageningen food bank, Personal Communication, 2015)*

Most locally-based food banks develop their own admission procedures centred on the criteria that were set by the members of the VNV and fit local circumstances. Some municipalities will offer food banks more tools or means to deal with admission of clients.

Problematic to food banks is the stigma around being a client of the food bank. This is multidimensional, as it concerns both experiences outside and inside the food bank. This is reflected in some of the responses of the clients that go to the food bank of Wageningen, as someone emphasised about facing the volunteers at the food bank:

> *In the beginning I really had to overcome this barrier. ... Shame has to do with that. Nevertheless, that wasn't bothering me anymore once I had gone to the food bank. I was just so grateful for their help. There are really nice people involved in the food bank.*
>
> *(Wageningen food bank client 5, personal communication 2015)*

Clients also face stigmatisation of the world outside the food bank as another client explains which is seconded by one of the volunteers of that same food bank.

> *I'm not bothered by it, but I do hear people that really feel like they are kind of at the margins of society, like people look down on them. ... Some people are really ashamed and when they walk into the street [of the food bank] they hope they don't run into someone they know.*
>
> *(Wageningen food bank client 2, personal communication 2015)*

> *I think in general people are happy they get the support and they are thankful for it. Sometimes you hear people say - not clients, but people on the street – that [food bank] clients are lazy. In general no one wants to go to the food bank, because people feel ashamed and there are all kinds of stereotypes... But most people are thankful.*

*(Wageningen food bank volunteer, personal communication 2015)*

Through locally based fund-raising activities, the interviewed local food banks attempt to create more awareness around the topic of food poverty (see section of food sourcing). These attempts make the issue more visible to locals, as they are confronted by it in e.g. the supermarket or their sports club. However, these attempts to deal with stigmatisation only scratch the surface, as the risk is that the general public gets the impression the issue of food insecurity is properly dealt with by the food bank.

At the same time, within the food bank there is a clear division between the clients and food bank volunteers, which further reproduces the difference between the two groups.

> *We have a principal rule that says clients cannot be volunteers. This has gone wrong before at other food banks. For example, a client who doesn't understand why we can't give out more food, while there are still a lot of goods in stock. There was some cheating and things were secretly taken. That just can't happen, so we decided that you can either only be a client or a volunteer. When you're not a client anymore, you can come and help us.*
>
> *(Wageningen food bank, personal communication, 2015)*

Local food banks are locally responsible for the construction of poverty, as they are the gatekeepers of one of the main institutions a food insecure person might call upon. Many are aware of the stigmatisation of the poor and try to attend to these issues by awareness and fundraising campaigns. However, these stereotype images of poor are often deeply embedded and even food bank volunteers need reminding of that from time to time.

### Interaction with institutional setting

Connection to other local institutions is an important part of the locally-based food banks' business. Dealing with institutions such as the municipality, social welfare institutions, retailers, churches, and urban food initiatives make these food banks fit into the local context of a certain city or village. Some food banks are focussing on the institutions that are most central to their objectives, while other food banks look more outwards and try to establish relations with newly emerging societal movements (see section of 'new collaborations').

Concerning the government, because of the umbrella-like governance structure that divides responsibilities between the VNV and the local food banks, local food banks mainly focus on interaction with the municipality. However, most municipalities are reserved in the means they offer food banks, as this would conflict with their own poverty reduction policy:

> *The government doesn't pay the food bank anything. We have also spoken to the municipality and asked: 'There is quite a lot of misery, can't you help us out?' And they think that what we do is all very sympathetic and all, but they do think that if they would support us they acknowledge that their poverty reduction policy has failed. [sarcastically:] And this can of course not be true, because they have a very good poverty reduction policy! So they tell us: 'Our poverty reduction policy is of such quality that the food bank is not necessary.' Yet the food bank exists. So there is clearly tension there...*
>
> *(Wageningen food bank, personal communication 2015)*

Although most municipalities argue their poverty reduction policies are efficient, the food bank also sees a lot of poor that are not targeted through the municipal policies or simply cannot be reached. Most people that qualify for a food package often also receive other forms of social welfare that are controlled via these sub-systems located in the municipality, such as Social Welfare. However, especially when it comes to the 'new poor', such as freelancers that bankrupted and freshly graduated students that simply cannot find a proper job, food banks see municipal targeting failing.

> *In general they don't use any resources from the municipality. The only one who knows of them is the Tax Authorities, because of the rent- and care allowance they receive.*
>
> *(Wageningen food bank, Personal communication, 2015)*

These 'new poor' do not find their way to the food bank easily, since most believe their living situation is about to change and they will not require food assistance in a short while (Wageningen food bank,

personal communication 2015). Most of them find that to appeal for social welfare cost too much time and requires them to give too much intimate information, such as income and expenditures.

For those who already found their way to the food bank, social welfare targeting often improves. All food banks have the requirement that prospective food bank clients interact with social workers, leading to a better and more flexible targeting of the poor.

> *We do check if all [welfare] resources are used, but we don't have any statistics of them. This is of course an important point, but this is done through the social worker. The social worker stimulates the client to start using other [welfare] resources, but we don't.*
>
> *(Wageningen food bank, personal communication, 2015)*

The food bank has become a trusted space for people in need of help and as such municipal social welfare counsellors sometimes even work through the food bank. Being a trusted space for clients, it improves the connection to multiple services and hereby allows for a more precise targeting of poverty alleviation. A social welfare worker emphasises the role of food aid in assisting people to become more self-reliant:

> *One condition [for clients] to be referred to the food bank is to accept assistance. I'm very clear in that, because [the clients] really have to do something about their current situation. [The food aid] ends at some point and it is meant as such; a temporary support to give people time to improve the situation they are in.*
>
> *(Solidez Wageningen, personal communication, 2015)*

In spite of the food bank's contribution to social welfare targeting and responsibilities they are taking up, most of the municipalities still do not support the food bank financially, which is still a point of annoyance for some local food bank leaders (Wageningen food bank, personal communication, 2015).

Contrary to the annoyances of the food bank leaders, municipalities are often important donors of the local food banks, albeit mostly in terms of elements for the infrastructure of the food bank. The by the Ministry of Social Affairs and Employment encouraged '*Toolkit for collaboration between municipalities and food banks*'[6] also recommends some of the commonly contributed resources. The municipality has multiple options to support their local food bank: The space for the food bank is often owned by the municipality and can be either rented out for a lower price or for free. Subsidies can be given for transport; the hire or purchase of a van, or the made costs to pick up food from the distribution points could be compensated. Waste is often collected free of charge by the municipal waste collection services. Other support can be given by taking responsibility for the training and educating of volunteers, or delivering staff. Because of the diversity of food banks and the municipalities they are in, there is a large range of approaches and forms of collaboration. The 'Toolkit' for collaboration also emphasises the strength of the diversity in approaches.

The local food bank has taken up quite a number of responsibilities around poverty alleviation that belonged to the municipalities. These local food banks have become part of the space in which social workers can address the most vulnerable and their issues of low income, indebtedness and unemployment. Although food banks are supported by the municipality in the form of services, some food banks leaders clearly point to the tension between the work they do and the municipal poverty alleviation policy.

## Food sourcing

The amount of sourced (fresh) foods had always been a problem for food banks and continues to be one. Relying on supermarkets alone is problematic, since there is a limit to the time food can be kept and is still fit for redistribution. Food outlets such as supermarkets create large amounts of unsold food that is no longer appropriate for sale. Unlike the food that comes directly from the food industry, the shelf life of

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[6] *Toolkit – collaboration municipalities and food banks*: http://bit.ly/1KcBdNF

these products are limited and are at some occasions even passed shelf life upon arrival at the food bank. Combining this with the continuous search for sufficient food, this creates a sort of dependency, as board members of the Wageningen food bank emphasise:

*'We don't have the luxury to turn down food from supermarkets. You're happy with what you get.'*
*'Sometimes it feels like we are the drain of the supermarket. As if they come to us to dump [their food waste].'*
*(Wageningen food bank, Personal communication, 2015)*

Although the amount of food coming in is high, logistically this is challenging for food banks as they need to vicariously sift through the incoming surplus food – under pressure of the VWA (Food Safety Authority) – to see what can still be redistributed and what needs to be thrown away at once. To ensure a good working relationship food banks regularly talk to supermarkets about these types of issues. In most cases supermarkets try their utmost to save as much foods as possible and educate their employees in what can be donated and what cannot. However, the volunteers of the food bank still has to sort through the foods they receive and throw away some of the already wasted foods.

Although fresh products are a constant bottleneck, the VNV and local food banks have decided not to purchase food to supplement the food packages, as this would disrupt their position as a charity and could possibly lead to the food industry demanding money for the surplus foods.

*Our starting point is to not purchase foods. We don't do it. … if we would, it would create a market situation of sorts.*
*(Wageningen food bank, Personal communication, 2015)*

Not purchasing food and relying only on donated foods leaves them dependent on the food they get offered. Sometimes this means they get a load of products that were the result of a production fault, or for example an overproduction. Still, the food bank has to be aware of the safety of the products they receive since the VWA regularly checks on them, as the board member of the food bank in Eindhoven explains:

*Sometimes we get loads of faulty products. Whenever we get such a load the first thing I ask is 'What's wrong with it? …Because the VWA is breathing down my neck!' This means for example that a load of smoked sausages by Unox – which are supposed to weigh 500 grams – weigh only 450 because of a production fault. That means that they can't sell them in their normal, standard wrapping. Previously these would go down the drain… now they bring these types of loads to the food bank.*
*(Eindhoven food bank, Personal Communication, 2015)*

Much to the discontent of the food banks, the majority of the donated food is unhealthy and sometimes even inappropriate. Problems with the nutritional content of the food package continue to worry food bank leaders and remain an issue. Through local campaigns they aim to diversify their packages a little and improve the nutritional content, as for example in Wageningen is done through the '*Food Aid Estafette*' and in Eindhoven through a 'grocery list'.

*We do ask donors to buy particular foods. A list of products is available on our website. Sometimes a supermarket organises such an activity. People can than buy those products and donate them.*
*(Eindhoven food bank, Personal communication, 2015)*

*The 'Food Aid Estafette' is an initiative that spurs clubs and associations on to collect food among their members or people of their organisation. Then they pass the task on to another. In this way we are kind of securing a continuous flow of food to the food bank. But it also creates awareness around this problem.*
*(Wageningen food bank, Personal communication, 2015)*

In many cases these local campaigns also raise some awareness while at the same time contribute to the food sourcing of the food bank. Churches also help food banks in complementing the food packages with healthy and fresh foods. Although food banks should not purchase food, they can go around that by having the church purchase the type of foods they need and subsequently donate them to the food bank.

*With the money saved up by the church, we were able to complement the food packages for all households in the 3 municipalities. It meant we could buy something special that was truly fresh and kept for a longer time than the average products. Like this Easter, we bought chicken.*

*(Wageningen food bank, Personal communication, 2015)*

These types of campaigns allow the local food bank to bring some diversity to their food packages, as they do not have to rely solely on what is donated. They actively try to keep the packages they distribute as diverse and healthy as possible.

Considering the quality and content of the packages clients' opinions vary. The following client emphasizing the variety of the package and that '*a little creativity*' allows them to prepare good and appropriate food, while the second client talks about other clients that thought the pros did not weigh up to the cons of the food packages and therefore stopped coming to the food bank.

*I also like that the food packages are really varied. If you are a little creative with cooking, you can make a decent spaghetti sauce!*

*(Wageningen food bank client 4, personal communication 2015)*

*I know somebody who stopped [going to the food bank] because she thought it didn't do her any good. It was not benefitting her. ... I also hear some complaints about the things in the package. And I understand it, but I also think you are getting it for free and you don't have to buy anything else. You can also take it out of your package and leave it here for someone else.*

*(Wageningen food bank client 5, personal communication 2015)*

A large share of local food sourcing centres on deliveries from the supermarket; foods that are too close to the expiration date to sell. These types of products are highly unreliable as they cannot know how much or what kind of products they will receive. These in general more instable food sources are complemented with more stable sources of food from the food industry through the collection and distribution of the VNV. These types of products have not even reached supermarkets and often have a longer shelf life, flows are more predictable and volumes are larger.

### New collaborations

Another development that is becoming more popular among some food banks is collaboration with local social movements that can in some way guarantee a stable source of fresh and sometimes even organic vegetables and fruits. For example, in Eindhoven an urban food initiative grows food exclusively for the food bank; they even take the number of food bank clients into account at the start of the growing season.

*The vegetables that we grow are all for the food bank. Our professional gardener takes the number of food banks clients and families into account [when he makes a cultivation plan].*

*(Stadsakkers, Personal Communication, 2015)*

These types of collaborations come in all sizes and shapes and differ from food bank to food bank. In the case of Eindhoven, the Stadsakkers (an Urban Food Initiative, as also described in chapter 2) can supply the majority of the fresh foods and even organically. This means that the clients of the Eindhoven food bank often receive food that was exclusively grown for them with care, is local, and hyper-fresh.

Although the Stadsakkers are a rather large and professional example, there are many other examples of urban food initiatives that donate to the food bank (see figure 3). They may for example donate 50% of the vegetables they produce. Or owners of kitchen gardens or allotment gardens decide to donate some of their produce, which is often collected by putting it in a special crate at the allotment garden. One individual will then bring these freshly harvested foods to the food bank to be distributed.

Some food banks choose to hardly or not collaborate with urban food initiatives for logistical reasons. The food bank of Wageningen has refused several collaborations and donations, even though organisations and people with allotments have offered fresh foods multiple times. Considering the instability and insufficiency of the food source they feel like it does not contribute enough.

*From people gardening on the [allotments] we occasionally receive vegetables. But sometimes we have to harvest the vegetables ourselves. That means we need volunteers who can harvest and know what they are doing: Volunteers who don't step on the other plants and who know how and what to harvest. So that just takes too much effort.*

*(Wageningen food bank, Personal Communication, 2015)*

The advantage of an initiative like the Stadsakkers is that the food bank can truly rely on the supply of fresh foods: it is very stable and the volume is always big enough to supply all clients with fresh vegetables. Smaller more ad hoc initiatives, like the collection at allotment gardens, are unpredictable and unstable which is not something the food bank can rely on to supply them with fresh vegetables.

In some cases, these urban food initiatives grow foods that are unknown to the some of the food bank clients and are sometimes even deemed 'inappropriate'. In Eindhoven they already made several changes in their cultivation plan after having done a survey amongst the food bank clients.

*Recently we had a survey among the clients asking whatever they liked, enjoyed, and disliked. After this survey, we decided to no longer cultivate turnips. ... Chard also wasn't popular: people weren't sure what to do with it and said it resembled grass.*

*(Stadsakkers, Personal Communication, 2015)*

Now the Stadsakkers focus on very 'Dutch' vegetables such as leek, endive and potatoes, as the clients said they would prefer these vegetables the most. The Stadsakkers explored which vegetables are best cultivated in their circumstances and also assure a long harvest season. Currently their harvesting season is stretched from March to December, much to the content of the food bank of Eindhoven.

These initiatives are vital in the sourcing of fresh vegetables and especially vegetables that have not been labelled as 'food waste'. Problematic is that most of these social movements are voluntary and many are not very professional, which makes them a real vulnerability for food banks as issues with stable food supply often arise.

Secondly, many of them heavily rely on financial donations to provide them with the needed resources. Although these types of projects can often appeal for subsidy at the municipality on the basis of wanting to promote social cohesion in problem neighbourhoods, they often still have to seek out donors to assure enough financial means to keep the project going. Nevertheless, many local food banks (see figure 3) pursue connections to and arrangements with such urban initiatives in various constructions, shapes and sizes.



**FIGURE 3 URBAN FOOD INITIATIVES OF VARIOUS SIZES THAT DONATE FRESH FOODS TO THEIR LOCAL FOOD BANK**

## 3.3. Reflection on transformative capacity

In the international FNS landscape Food Banks are a contested phenomenon, considered by some as a panacea and for others only a plaster on an aching wound. In the Netherlands this debate recently flared up due to increasing numbers of clients because of the economic crisis and is a subject rather unexplored. This report contributes to empirical evidence of Food Banks and their positioning in "wider food and welfare landscapes" in pursuit of change. We explored FNS practices of Dutch food banks at different levels and in different settings with the intention to assess their transformative capacities (see table 3). Some processes within the food bank are assumed to hold little transformative capacity, such as the (in)ability of food banks to impact the root causes of food poverty, or the dependency on 'food waste' from retailers and large food industries. Opposite that, processes that are regarded as holding transformative capacity are also performed by some food banks: Such as the alliances some food banks have made with local farm-enterprises or urban food initiatives, or the contribution to the design of new institutional arrangements and public-private partnerships at national and EU level.

To structure the analysis of food banks and their potential transformative capacity, we will synthesise using 'Transformative Social Innovation theory' (Avelino et al., 2014). Using their conceptualisations of shades of innovation and change, we explore where the food bank is located in the "wider food and welfare landscape" (see figure 4**)**.

Food banks in the Netherlands contribute to collaborative and reflexive learning, however we find there is weak evidence of its transformative capacity for FNS change. The internal structure of the Dutch Food Banks has contributed positively to collaboration within its institutional setting, as it gives ample space to reflexive governance arrangements considering the regulations are open for 'local' interpretation. Reflexive governance is then defined as a "mode of steering that encourages actors to scrutinize and reconsider their underlying assumptions, institutional arrangements and practices" (Hendriks and Grin 2007, p. 333) and "aims for reflexivity regarding the limits of prognostic knowledge and actual control of complex processes of change" (Voß and Bornemann 2011). This gives room for local food bank leaders to see what opportunities, resources and challenges they face and try to respond accordingly, resulting in a diversity of practices at the national and local level. Moreover, this structure has a national and local level; however these scales do not assume a certain hierarchy, as the members of the VNV have an equal say in the direction taken by the VNV. Considering there are many local food banks operating under the VNV in highly differentiated contexts spread all over the Netherlands, this leads to different reflexive approaches in admission, food sourcing and food distribution all under the 'umbrella' of the VNV.

The food bank's connection to social welfare is resulting in more consistent and coherent support and poverty alleviation. Decentralisation of social welfare has pushed poverty alleviation into the municipality's responsibility and food banks have stepped up by filling the void that was left in some regions. They contribute to the enhancement of the targeting of Social Security Policy by providing a space for interaction between social workers and those most-vulnerable. However, the total number of food insecure that are reached by the food bank is minor, which therefore assumes little change in FNS.

Furthermore, as the VNV acknowledges, the distribution of food packages does not impact root causes of food poverty and is therefore just a way of treating symptoms. This leaves a major portion of poor neither targeted nor structurally aided by the food bank. As the food bank stays 'a-political' they do not engage in the debate around food security and therefore contribute to the stagnation of the current situation at the political level.

Generally considering more healthy FNS practices by the food bank, there is weaker evidence of transformative capacity. However, different practices related to newly emerging social movements are performed at the different scales. At the national level, arrangements with the government and food industries are deliberated by the VNV, which ensure a level of stability and diversity of sourced foods among the Dutch Food Banks. By venturing into circular economy focussed projects, that turn surplus food into healthier processed foods such as soups, the VNV is also exploring new avenues to increase

the amount of incoming food and reduce food waste. These types of arrangements can besides creating more stability potentially enhance the nutritional content of the food packages by the VNV.

**TABLE 3 FOOD BANK PROCESSES AND DIFFERING LEVELS OF TRANSFORMATIVE CAPACITY**

| **Dutch Food Banks as reassembled food poverty spaces** | |
| --- | --- |
| **Process interpretations that assume little transformative capacity** | **Process interpretations that assume transformative capacity** |
| Food Banks do not have impact on the root causes of food poverty and are embedded in neo-liberal practices (which arguably are part and parcel of the issue of the economic crisis and food poverty) | Food Banks contribute to a better and more flexible targeting of food poverty alleviation based on a redistribution of responsibility to the benefit of civil and private actors, due to decentralization of social welfare and a movement towards a participatory society |
| Only a minor part of the total Dutch poor are reached by the support of the Food Bank, which has little impact on the FNS change in the Netherlands | Food Banks are actively involved in the creation of new, more place specific interlinkages to food assistance and poverty alleviation and contribute as such more substantially to FNS system change |
| Food Banks remain largely dependent on 'food waste' or surplus food from retailers, whereas the latter mostly show little interest in the specific needs and wishes of Food Banks | Food banks (especially on the national level) are diversifying their incoming food sources based on reducing food waste and contribute to narratives of circular economies |
| The reliance on mostly surplus food makes it difficult for the Food Bank to take food health criteria into account in their food redistribution practices, and remains a major issue | The VNV is increasingly involved in fresh food waste reduction (e.g. *Soupalicious*) to prolong, diversify and improve their food assortments<br><br>Although to different degrees, local Food Banks succeed in establishing connections with newly emerging social (urban food) movements  and as such can also contribute to a re-localization of food systems |
| Food Banks remain strongly dependent on volunteers and it's professionalization is tied to the number of skilled (pensioned) volunteers they manage to attract | Local Food Banks may establish alliances, interlinkages and partnerships with urban food initiatives which makes their position more reliable<br><br>Food Banks contribute to narratives around the participatory society |
| Food Banks still largely lack structural institutional support from different policy levels (EU, national, regional, local), while they fill the vacuum of processes of decentralization of the social welfare system and narratives of participatory society | Food Banks actively contribute to the design of new institutional arrangements and public-private partnerships by cooperation at national and EU level |
| Food poverty alleviation as single issue remains marginalized in Dutch FNS setting | Food poverty alleviation is increasingly incorporated in wider alternative FNS assemblages through a diversity of practices on behalf of the Food Bank and increasing interest in fair- and shared economies |

At the local level contributions to the nutritional content of food packages are made by arrangements and alliances with urban food initiatives. Through these new connections, food banks manage to improve the

quality of incoming food, as it is fresh and often organic, and contribute as such to education and awareness creation among clients (new products and accompanying recipes) and the local community close to the urban food initiative. However, these sources of food are rather unreliable and highly differentiated in amount and type. In many local food banks there is some evidence of synergistic relations; however considering the (current) instability of these interlinkages its transformative potential is weak.

Through the reduction of 'food waste' at the local level and development of larger food waste-reduction projects the Dutch Food Banks have stronger societal transformative capacity by interweaving food poverty mitigation and food waste reduction. Although the concept food waste is broadly used by the VNV and in the Netherlands, a more precise distinction should be made between food that is surplus (and can be redistributed) and food that is actually waste (and thus cannot be redistributed). Nevertheless, there are some tensions in this field, considering many food industries are also exploring ways of reducing food surplus, which will diminish the amount of food the food bank can either redistribute or revalorize. Also, currently food surplus reduction is a popular topic and many other business ventures are popping up, exploring how they can revalorize food waste into a saleable product. In the end, the food bank relies on them being able to assure a 'win-win situation', which is might become more difficult with the current trend of increasing interest in food-waste-reduction enterprises.

The food bank is critiqued in the literature for many reasons; there are many scholars arguing that food banks are maintaining the current situation through their existence and they are legitimising the state's ignorance of its responsibilities in social security. On the other end there are scholars who acknowledge that the need for food banks should be out-of-date, but who do see food banks as the main institution with the means to deal with the problem of food insecurity at this point in time.

Considering the food banks we have explored in this report, we stress that food banks should not be seen in isolation from the more complex, wider FNS landscape, as they interact with other systems and practices part of that landscape. Turning to the shades of societal innovation (Avelino et al., 2014), we see that the food bank can potentially contribute to and interact with other systems that go beyond solely FNS (see figure 4). To conclude, the contribution of food banks to transformative FNS change in the Netherlands is difficult to pin down, as it is a multi-layered phenomenon that interacts with many other societal systems: Although a direct influence on FNS seems to be weak, other practices the Dutch Food Banks are performing and interacting with have more transformative capacity and as such contribute indirectly to FNS change.
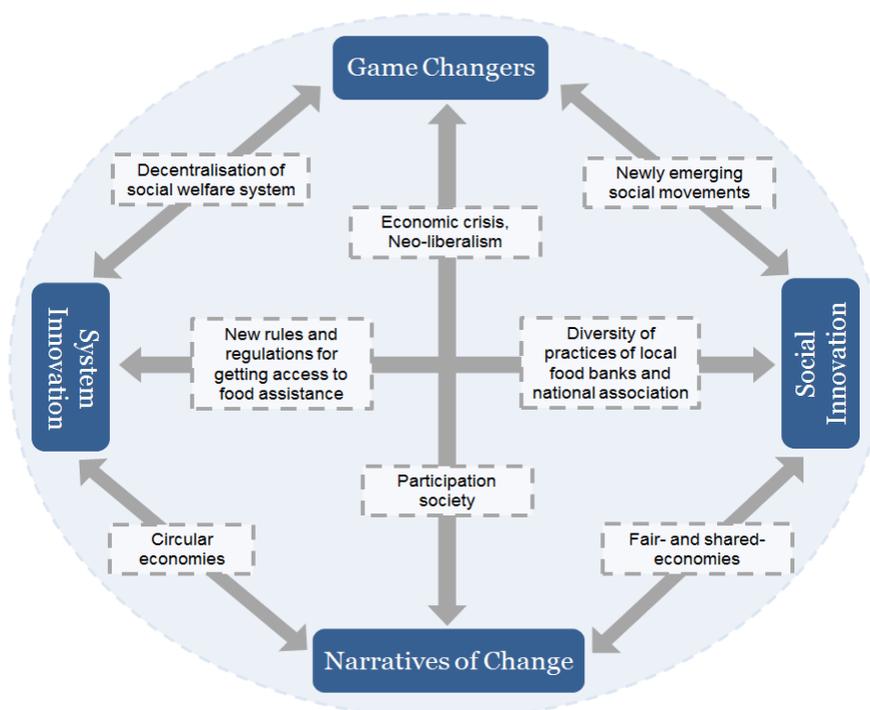


**FIGURE 4 DUTCH FOOD BANKS AND THE 'SHADES OF SOCIETAL INNOVATION AND CHANGE'**

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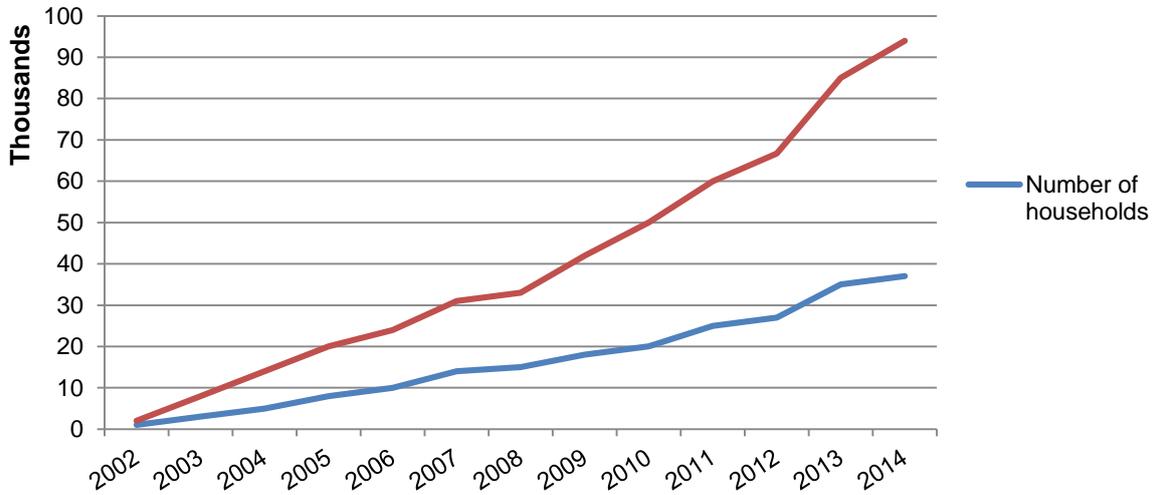
## 5. ANNEXES



**FIGURE 5 NUMBER OF DUTCH HOUSEHOLDS AND PEOPLE RECEIVING FOOD ASSISTENCE FROM THE VNV
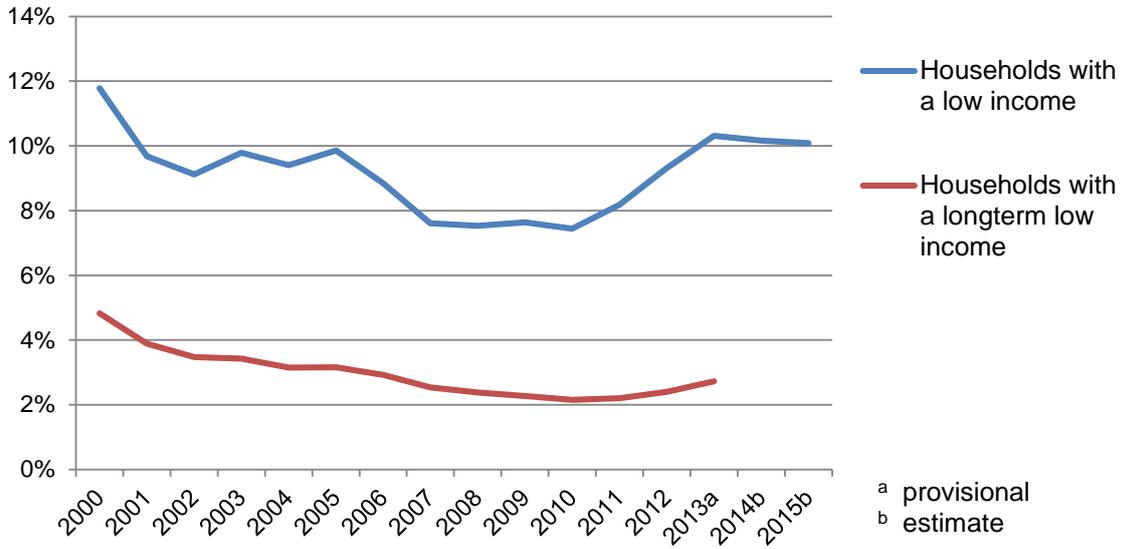SOURCE: (VNV 2015A)**



**FIGURE 6 PERCENTAGE OF DUTCH HOUSEHOLDS WITH A LOW INCOME
SOURCE: (SCP AND CBS 2014)**