



Harvesting the Non-Food Benefits of Urban Agriculture: Finding and engaging unexpected partners?

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Photo by Hotspot Hutspot

The city of Rotterdam is characterised by the paradox of being an international port - a gateway to Europe, particularly for fruit and feed ingredients - while at the same time having a small but prolific regional food movement. This movement consists of citizens and entrepreneurs with strong local connections who are motivated by environmental and social aims. A wide range of private sector actors and departments within the municipality are pursuing aspects of a more regionally-oriented food system.

Food is not the only driver

What, at least in theory, connects the diversity of actors in this mix of local and global orientation is the idea that Rotterdam should strive to become a more enjoyable and more sustainable place to live and work. An integrated city region food system could be part of this ambition, but many actors involved in food are not primarily interested in the food system itself, but rather focus on other benefits that it offers the city. These benefits include environmental services, improvement of public health and social justice, education, employment and reintegration. Other benefits that a more integrated city region food system can deliver include reduction of energy use or energy production and better ways of handling and reuse of waste.

Non-traditional food actors

In Rotterdam, we see an increasing participation of actors who are traditionally not considered part of the food sector such as public health organisations, schools, social housing

companies, commercial real estate, innovative start-ups, proactive NGOs and social entrepreneurs.

They are primarily driven by a wide range of urban motives. These range from improving social cohesion, improving public health and building a sustainable future to securing real estate value by providing a beautiful and appealing living environment. The actors' involvement ranges from providing access to financial support, land and project development to providing access to human resources, expertise, networks and peer knowledge. For example, private funds from the Rotterdam region that support social, cultural and/or environmental goals have facilitated city food region initiatives through grant support. Typically they support events, and invest in materials and consumables such as plants, containers or kitchens. The Dutch Rabobank (originally a cooperative with a focus on agriculture) offers regional funds, to support food initiatives by local citizens and entrepreneurs as part of their Banking4Food strategy.

Food and real estate

It is striking that *social housing corporations* (SHCs) such as Havensteder, Vestia and Woonstad Rotterdam, as well as commercial real estate developers, have played an important role in facilitating urban agriculture and food-related initiatives by providing access to land and financial support. They own vacant land and office space that was not immediately being developed due to the economic crisis. For urban food-related initiatives, access to space both for production and retail activities is essential, and access to temporarily unused land or vacant office space is one way to avoid the competition for scarce and valuable space in the city. Vacant land is turned into a collective "edible" green space. Vacant office space is turned into a neighbourhood restaurant that teaches children to cook. SHCs appreciate the benefits of such initiatives as they have the potential to

Table 1: Overview of non-food private players, the nature of their involvement and their motives

Private sector type	Nature of involvement	Private sector actors in Rotterdam	Motive
Private funds	Financial	Volkskracht	Social cohesion, empowerment
		Verre Bergen	Education, empowerment
		Fonds Schiedam-Vlaardingen	Public space improvement
		iFund	Impact investment
Social housing corporations	Financial; access to land; initiating	Havensteder	Neighbourhood improvement
		Vestia	Neighbourhood improvement
		Woonstad	Public space improvement
Real estate developers	Financial; access to land	Dura Vermeer	Corporate Social Responsibility
		AM	Placemaking
		Provast(Markthal)	Real estate development
		CODUM/ZUS (Schieblock)	Urban regeneration
Land owners	Access to land	Natuurmonumenten	Multifunctional green space
		Trompenburg	Attract new visitors
Providers of essential flows	Access to resources / financial	Evides	Providing water
		ENECO	“Green for red” compensation for development infrastructure
Engineers, consultants architects & planners	Access to (technical) knowledge, expertise expertise	Priva	Innovation; learning; development new business opportunities
		BAM	
		Tauw	
		ARCADIS	
		Rotterdam Metabolists	
Care & reintegration organisations	Access to human resources; coaching; initiating; access to land	De Stromen Opmaat Groep (Aafje)	Corporate Social Responsibility
		WMO Radar	Reintegration, social work
		Pniel	Social cohesion, empowerment
		Magiso10	Reintegration
NGOs	Providing a network; access to peer knowledge	Slow Food / YFM	Knowledge exchange
		VELT	Connecting, representation
		Eetbaar Rotterdam	Shared interests, food literacy
Social Entrepreneurs	Initiating, development and execution; entrepreneurship	Vakmanstad	Education, empowerment; food literacy; health
		Rotterdamse Munt	Empowerment; food literacy
		Voedseltuin	Empowerment; food literacy
		Proefhof (Kook/Oogst met mij mee)	Education, empowerment, food literacy
		Buurtlab	Education, food literacy
		Rotterdams Forest Garden Netwerk	Education, empowerment; food literacy; eco literacy
		Moestuinman	Education, empowerment; food literacy; eco-literacy
		Caroline Zeevat	Food literacy, social inclusion
		Bob Richters, Mireille v.d. Berg	Education, empowerment, food literacy, social design
		Ester van de Wiel	Social design
		Rotterzwam	Sustainability, blue economy
		Uit Je Eigen Stad	Innovation; sustainable food system; food literacy



Photo by Hotspot Hutspot

increase social cohesion and the quality of shared and public spaces and to improve a perceived 'sense of place'. Commercial real estate developers now also consider an urban farm as a facility for residential urban development, or even as a central force for area development.

The same mechanism can be observed in the way food distribution and retail are used as drivers for urban development. As high streets are under increasing pressure from web shops, retail property developers are looking to develop different shopping experiences. As demonstrated by the privately-developed food halls Markthal and Fenix Food Factory, food offers plenty of opportunities for an enjoyable shopping experience through smelling, tasting, touching and eating, all things that cannot be done through the internet. It is assumed that this will reflect on real estate value, i.e. increasing or at least maintaining value. Such initiatives also have the potential to extend the average time of residency for inhabitants in the neighbourhood. This can translate into savings and profits from a real estate point of view.

Four examples of food system support by SHCs or real estate developers can be given. At *Uit Je Eigen Stad*, an urban farm on a derelict site in the Rotterdam area, the SHC or private developer roles are site design and building services, with the pre-investment to be recovered through rent. At *Hotspot Hutspot*, a pop-up restaurant that teaches children how to cook from scratch, the SHC role is to provide financial support as well as access to land and building space. *Stadslandbouw Schiebroek* is a network of urban gardens for residents in a social housing neighbourhood where the SHC role is providing access to land and water as well as hiring of a coordinator or coach). The already-mentioned *Markthal* is a retail real estate project with a focus on food where the owner of the Markthal rents out space. Their motives vary and include corporate social responsibility, asset value addition and place-making. SHCs may have a longer term relation with urban food initiatives than real estate agencies do. Most food-related projects, such as Hotspot Hutspot and Stadslandbouw Schiebroek that are supported by SHCs, directly benefit their main target group: the tenants of social housing. A longer-term commitment, and one that combines different support strategies, seems to be the most successful.

There are also various private land owners who make some of their land available to food production or related activities. Inside the city for example, Trompenburg Gardens and Arboretum are planning to turn 1.2 hectares of its 8 hectares public gardens into a food forest in collaboration with, and initiated by, a group of social entrepreneurs.

Social entrepreneurship

Social entrepreneurs form an important part of the urban landscape, not just in the area of food production but also in terms of social cohesion, social care and job coaching (Bakker, 2016). Projects often attract volunteers who are able and willing to support the social entrepreneur in engaging the usually-disadvantaged target group. This is the participative society at its very best. These projects supplement urban social welfare in the conventional sense. They are more flexible but also often less professionally-recognised than more traditional public or private services that are financed by local government or private foundations and whose management has professional stamps of approval. A lot of projects that SHCs support are initiated by such social entrepreneurs.

Yet social food entrepreneurs in Rotterdam are under constant pressure to get absorbed into the formal social welfare system. They are pressured to apply for municipal and philanthropic funding, to engage in social media contests to win extra resources or to cut back on their own standards of living to navigate periods of lack of funding. For example, most social entrepreneurs are not properly insured and do not save for a pension. It should also be noted that the more dependent an urban food initiative becomes on income from sales, the more restricted they become in terms of people who can participate. Further, social entrepreneurs are 'competing' over easy-to-engage target groups and they may also 'compete' for volunteers who are able and willing to work in this increasingly challenging environment.

Engagement of other non-traditional food actors

Social care and rehabilitation organisations are involved in food-related activities as part of their work to help people heal or enable them to get back to work. Traditional utility companies such as those supplying energy and water have

had only very limited engagement in developing specific solutions to support short food supply chains. But some innovative projects have emerged. Between 2006 and 2009 the energy company E.ON was a partner in a project that used waste heat from its plant in the Rotterdam port area to grow tropical shrimps (Happy Shrimp). Other initiatives have developed around the safe re-use of food waste for human consumption. This is done by the Food Bank and also by pop-up restaurants such as Hotspot Hutspot. These initiatives target people with low income and are therefore socially inclusive by design. Another initiative is the start-up Kromkommer that turns discarded (odd-shaped and surplus) vegetables into products such as soups and now also supplies supermarkets. This wide range of food system innovations also attracts engineers and consultants, such as suppliers of technological solutions as well as engineering firms.

Encouraging non-traditional players in the food system

These examples show how the value of agriculture or food production is no longer measured only in the food produced but in a range of services to the city. The involvement of new private sector players in building city region food systems can be explained by a growing awareness of these benefits, and of practical ways to valorise them. This is also a key to encouraging further engagement. Social entrepreneurs are very engaged but their contribution could be bigger if there was a more clear and consistent policy from the municipality. Financial support should develop from *ad hoc* grants to more systematic support, rewarding the environmental and social services that these initiatives provide to the city. It is interesting to consider that the notion of a CRFS connects a lot of different parties for whom food is not a first priority. Food is a powerful way to connect these diverse parties, but it cannot be expected that these parties will produce an overarching strategy that stretches beyond their own interests. The same can be said of most of the (inter)nationally oriented food sector actors that are based in Rotterdam. In their case, they are less committed to the city region scale because they can move their operation elsewhere if necessary. Companies with a place-based background however, particularly family businesses that have a history in the area, are more likely to innovate at the city region scale. To be sure, these companies operate within international market circumstances, but their commitment is not just to profit. Inspired by local initiatives, they have the ability to scale up innovations from a micro-(neighbourhood) level to a regional scale.

A common narrative

It is important to engage the private sector actors on their own terms. To them, the non-food benefits are the most valuable. They can help capitalise these benefits in a way that can support the development of a more integrated city region food system. However this implies the need for a policy environment that enables this by connecting the different motives of the private partners. To have a diversity of private parties be part of an integrated city region food system demands a common narrative that gives each part its place. This narrative does not have to be a shared vision, but should give room to the constituent parts to pursue

their own priorities in mutually supportive way. Their activities and the beneficial side-effects, such as a diversity of ecosystem and social services, are independent but constituent parts that support the development of the city and its food system. A policy environment that acknowledges the broader impact of food-related activities and stimulates private parties to actively engage in these activities and benefit from their services could offer such a narrative meeting ground.

Recommendations for a supportive policy environment

Lessons from studying the Rotterdam context can possibly be of value elsewhere. We identified the following list of recommendations:

At municipal level:

- help to reinforce and quantify the multiple benefits of urban and peri-urban agriculture for city region food systems, and support efforts to explicate, accredit and reward best practices
- support social entrepreneurship more consistently and strategically
- connect short & long food supply chains and investigate their possibilities for synergy, such as shared logistics or shared labour market
- support an open climate of innovation that is market-driven rather than technology-dominated and reinforce the social values around food
- address potential conflicts (for example over space, access to funding or markets) and make priorities explicit
- engage more actively with iconic food-projects such as the Markthal and Fenix Food Factory
- engage more actively with planning rural land uses around the city and stimulate managing this as multifunctional agricultural parks where food production, recreation and biodiversity go together more harmoniously
- coordinate municipal activities, funding and the exchange of knowledge and experience with private actors that have similar goals, e.g. in the case of sustainable renovation of the housing stock SHCs and property developers should be invited to work together with the relevant municipal departments
- record and update municipal intentions in a food strategy which states concrete actions and goals.

At the regional and national level:

- incorporate non-food benefits in agriculture policy
- link rural development with city regions economically, socially and spatially
- match regional, national and EU agriculture funds with urban food policy ambitions and aspirations
- appreciate the flexibility of private sector players, who will carve out their own role in the continuously-evolving food policy narrative.

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