

# Towards Urban Agriculture in 2030

This policy brief suggests policy options in relation to the realisation of urban agriculture and local food production in the Living Lab of Oosterwold in the Netherlands. The two scenarios discussed with residents, focused on Oosterwold in 2030 with (1) an open landscape and self-organisation, where governmental interference is limited - Oversupply of locally produced food are sold through short supply chains to Almere city region by means of digital technologies; and (2) a scenario with a closed landscape and stricter governmental regulation, which is characterised by an urban atmosphere with high-rise buildings combined with urban agriculture. In this scenario, community-building around (urban) agriculture is fragmented, while in the first scenario community-building pivots around the short food supply chain. The policy options in both scenarios gravitates towards means to support community-building through urban agriculture, like hiring green community intermediaries, starting a central digital hub, and constructing a food community building.

#### **CONTEXT**

The Living Lab (LL) of Oosterwold is located in the Netherlands, which is one of the leading countries in terms of digitalisation. Oosterwold (Figure 1) is a watershed in Dutch (peri-)urban planning. This new periurban area of the city of Almere integrates rather than segregates urbanisation and (urban) farming. Moreover, the area is aimed to produce 10% of Almere food basket. In Oosterwold, like in most areas of the Netherlands, there is high-speed internet access. Moreover, the community of Oosterwold makes use of social media platforms and apps, like Facebook, Instagram etc. These preconditions are helpful for the community since the residents of Oosterwold rely on selforganisation and are obliged to farm 50% of their plots. Because the majority of the community has no background in (urban) farming, there is a risk of suboptimal usage of their plots for food production. Digitalisation can help to facilitate the exchange of knowledge and is considered helpful to establish a community in local food production and distribution.

Even though the community faces different future visions of how to evolve urban agriculture in the area as well as the lack of an appealing focal route to achieve these future visions, there are already some initiatives and projects that help to bring the community together and exchange knowledge regarding urban agriculture. A recent example is the food cooperation Oosterwold (www.coopoosterwold.nl). The cooperation, with financial support of the Municipality of Almere, develops an app for practical information on cultivation, coordination, and distribution of food production in Oosterwold. Moreover, the local councillors are currently discussing possibilities for the construction of a communal centre, where local vegetables and fruits can be stored and processed.



**Figure 1.** The new peri-urban Oosterwold of the city of Almere (NL).

Source: Municipality of Almere.

#### **RESEARCH APPROACH**

Two interactive workshops were conducted using a future scenario method which stimulates creative thinking regarding urban agriculture and discuss its future possibilities. The workshops revolved around the question: What does the urban farming community of Oosterwold look like in 2030? The scenario-axis method was used, resulting in four possible scenarios of how the future can unfold. The participants were asked to select two of these scenarios to further explore in the first workshop. The second workshop focussed on transition pathways from the current situation towards the (preferred) future vision. The following three main topics stood central to the first workshop: 1. urban agriculture, 2. community building and, 3. the role of digital technology in supporting urban and community agriculture building. Subsequently, the second workshop focussed at so-called back casting, i.e. extracting (today's) actions to achieve preferred future developments. In the second workshop different fictional headlines of newspapers related to the two scenarios were presented participants. The local newspaper headlines were shown to give participants an idea of the possible transition pathways towards the two scenarios of Oosterwold in 2030. These possible transition pathways were the starting point of a debate which was funnelled towards an action agenda.

# **SCENARIOS DEVELOPED**

The scenario building (workshop 1) started with exploring the two axes of possible future development of Oosterwold: 1) selforganisation vs strict regulation authorities and 2) open landscape vs closed (urbanised) landscape. The two selected scenarios by the participants of the workshop are called (1) Room for everyone (Figure 2) and (2) Manhattan with rules (Figure 3). In the first scenario, Oosterwold builds around an open landscape with selforganisation. In this scenario governmental interference is limited. Surpluses of locally produced food are sold through (selforganised) short supply chains to Almere city region.

To support food production in Oosterwold, digital technologies give the opportunity for interaction between food suppliers (residents) and to locally coordinate supply and demand. This scenario is more-or-less a continuation of current development in Oosterwold.



**Figure 2.** Scenario "Room for everyone". Source: (Jam Visual Thinking, NL).



**Figure 3.** Scenario "Manhattan with rules". Source: (Jam Visual Thinking, NL).

In the second scenario Oosterwold is defined by a closed landscape (much higher density of houses) with stricter governmental regulation. It thus opposites the first scenario. The scenario characterised by an urban atmosphere with high-rise buildings combined with (large plots of professional) urban agriculture. In this scenario it is a challenge not to avoid the national housing crisis i.e., land prices increase resulting in smaller plots to farm. Many new residents have outsourced food professionals production to or abandoned it, nevertheless, still 50% of the land is used for (professional) food production. Community building around agriculture thus is fragmented. Digital technology is used by the professionals for precision farming as well as to coordinate

the food production process and share knowledge. Digital technology is also applied to connect the farmers and the residents of the area. The local authorities strictly coordinate and control the 50% rule; however, the self-organising nature of the area is abandoned.



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The second workshop focussed at back casting from the two scenarios with the goal to compile an action agenda to achieve preferred future developments. This action agenda pivots around how Oosterwold residents as well as local authorities can support the development of (communities in) urban agriculture in Oosterwold in 2030. The essential need is to build food communities around digital systems in an area that relies on self-organisation (public investment comes secondarily). However, the different food initiatives in Oosterwold are still developing, and so are their (future needs for) digital means.

## **POLICY RELATED DISCUSSION**

Participants appreciated the conversation about the future of Oosterwold. Afterwards the conversation went on about how they can continue this way of thinking around the future for community building, urban agriculture, and digital platforms for exchanges.

Ideas were gathered regarding future initiatives/policies to facilitate 50% urban agriculture and who should be responsible for these initiatives. One of the ideas is the implementation of intermediary actors such as green community intermediaries. Such actors can actively share knowledge with residents on how to produce food, build food communities and can connect residents with similar demands intentions in terms of urban agriculture. This could speed up the process of embedding the urban agriculture performance in Oosterwold efficiently. Moreover, the green community intermediary could also give workshops, where community members meet and share solutions. This would concomitantly stimulate community building. However, the actors of the scenario workshop were not even sure how such an intermediary should be organised or funded.

The discussion at the end of the meeting made it clear that participants require support by the municipality or another overarching institution/actor whilst at the same time maintaining their self-organising practice. All the different ideas of initiatives that were discussed with the participants underlined the need of having coordinating actor that brings things forward. When participants discussed on whom could fulfil the leading positions they mostly pointed towards the municipality or local volunteers. Since most residents in Oosterwold work outside of the community, it is hard to find people who have the time, authority, and resources to start and guide initiatives supporting urban agriculture at level. Nevertheless, area some organisations emerge within the community. Besides the food cooperation Oosterwold, there are the Cooperation Oosterwold, the VoKo (a consumer cooperative), and the Oogsterwold (a knowledge platform).

These overarching initiatives could also be involved in the establishment of a food community building, where residents can store, process and exchange vegetables and fruits. For this, Oosterwold community needs to invest in a common place to establish this communal location. It would need someone who is proficient in handling storage, processing, logistics and who understands the food market. Such a position is crucial and could be merged with that of the intermediary. However (again), the question is whom should (financially) support this position? Alternatively, volunteers could get together to take over this task.



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## POLICY OPTIONS

#### Facilitate debate

- Discussions between residents and the municipality are needed and should be encouraged to develop mutual understanding of what can be expected from the residents as well as authorities in terms of urban agriculture and how to achieve this expectation.
- Conducting workshops and meetings, where community members meet and have to think of solutions together.

## Augment expertise in urban agriculture

- An (online and interactive) guide or a manual for urban agriculture that supports new residents to plan and align their food production at different levels in their development in Oosterwold.
- Hire green community intermediaries.
   These intermediaries actively share knowledge with residents on how to produce food, and build food communities, as well as connecting residents with similar demands or intentions in terms of urban agriculture or to organise workshops or meetings.

### Create a central digital hub

- The creation of a digital communal and interactive meeting point (website, platform and / or app) is supportive in gathering and sharing all kinds of information about urban farming, food production, food retailing and consumption.
- This platform should combine already existing sources of information with new information. The platform could also operate as food switchboard between Oosterwold and the greater community of Almere city region.

## Establish a food community building

- A food community building is considered as a cornerstone in creating a local food community in Oosterwold.
- Authorities should actively invest in the construction of this community building.

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Contact: Jan Eelco Jansma

Institute: Wageningen University & Research

Email: Janeelco.jansma@wur.nl

More information at: www.desira2020.eu



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