

# **The Agromere 'Arena': Bridging the Boundaries between the Urban Environment and Agriculture in Almere (NL)<sup>1</sup>**

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**Abstract**

Highly urbanised countries like The Netherlands tend towards a sharp delineation between the rural and urban environment, between food production and food consumption. Growing concerns about food prices, food security and the sustainability of the contemporary agri-food system reluctantly places food worldwide on the agendas of the cities. Could applied agricultural researchers play a role in bridging the boundaries between both environments? Agromere (2005-2009) shows a successful first step in bridging these boundaries in the Dutch city of Almere. Agromere is in this paper described as a research and design 'Arena'. The Agromere 'Arena' fuelled importantly the municipality of Almere to incorporate urban agriculture in the future development of the Almere Oosterwold area. The Agromere 'Arena' interfered with the existing networks in Almere using the stakeholder management approach of R. Edward Freeman. To interpret the value of this approach, the work of Mark Granovetter on the relation between interpersonal ties and information transmitting between social networks is used. Trusting a stakeholder as knowledge source is the key factor in transferring new knowledge, suggesting that the role of applied research could lay in creating a 'trustful' atmosphere using this stakeholder management approach.

## **(Short paper)**

### **Introduction**

In a highly urbanised country like The Netherlands there is a tendency towards a sharp delineation between the urban and rural environment. The sharp delineation is partly the result of the (post WWII) Dutch spatial planning policy to concentrate or cluster urbanisation (van Remmen and van der Burg, 2008). The segregation between urban and rural worlds in the Netherlands has its origins also in their separation at administrative levels. City development is the responsibility of the Ministry of Infrastructure and Environment, but food (agriculture), nature conservation and landscape development falls under the auspices of the Ministry of Economic affairs, Agriculture and Innovation (Gordijn *et al*, 2003).

The tendency towards two distinct poles - urban and rural - with strict boundaries is not a typical Dutch issue (Sonnino, 2009; Steel, 2008). Where today more than 50% of the mouths to feed are those of city dwellers, until recently food wasn't at the city (planners) agenda. Hence, food policies are generally non-urban (Sonnino, 2009). The American Planning Association calls it a "puzzling omission" that food is absent as a focus of professional planning interest, and therefore launched its Policy Guide on Community and Regional Food Planning in 2007 (APA, 2007). Let by the harbingers like Toronto (Can), San Francisco (US) and Belo Horizonte (Bra), it looks as if food reluctantly does become a part of the agendas of the cities (Morgan, 2009; Morgan and Sonnino, 2010). Growing concerns about food prices, food security and the sustainability of the contemporary agri-food system urge this development. Sonnino (2009) sets out that it is, more than ever, crucial to help cities to feed themselves, and also to explore the political tools and institutional arrangements needed to reconnect the cities sustainable with their surrounding regions. Referring to Redwood (2009), Sonnino (2009) also stresses that there is an important need for action research that links knowledge-building (providing data and in-depth case studies) and its field implementation (knowledge-exchange) while also empowering stakeholders to see themselves not just as generators of problems but as an active part of their solutions.

### **Approach**

Could applied agricultural researchers play a role in bridging the contemporary boundaries between the urban and rural environment? And what could that role be, and with which tools? We introduce the case of Agromere (2005-2009), in this paper described as a research and design 'Arena'. The Agromere 'Arena' was carried out by a small team of researchers of the Wageningen

UR Business unit Applied Plant Research. A central role in this team was reserved for two process manager with a background is agronomy and multifunctional farming.

In the Dutch city of Almere the Agromere team of applied researchers achieved a successful first step in bridging the boundaries described. By means of the research and design 'Arena' the Agromere team intervened in existing networks in Almere, using the stakeholder management approach of R. Edward Freeman (Freeman *et al*, 2010). In this paper we use this Agromere 'Arena' to explain the value of the stakeholder management approach in transferring new knowledge between social networks. To interpret this value, we firstly will introduce the work of Mark Granovetter (Granovetter, 1973) on the relation between interpersonal ties and information transmitting between social networks.

Communication between social networks could be explained through the strength of interpersonal ties (Granovetter, 1973). Tie-strength is characterised as the closeness and interaction frequency in interpersonal relationships. Granovetter (1973) states that individuals are sometimes influenced by others only through superficial interactions. This type of interaction provide access to novel information by connecting otherwise disconnect groups. He labels these influences as weak ties. Hansen (1999) emphasizes that weak ties will help with searching for novelties but have difficulties in transferring complex or tacit knowledge. In contrast, a strong ties will constrain search for novelties but helps transferring complex knowledge. According to Levin and Cross (2004), trusting an actor as knowledge source is the key factor in transferring complex or tacit knowledge. They call ties like this "trusted weak ties".

In the Agromere 'Arena' the team of applied researchers tried to construct an atmosphere in which these "trusted weak ties" could operate, by using the stakeholder management approach of R. Edward Freeman (Freeman *et al*, 2010). The objective of stakeholder management is to transfer the ownership of new ideas or knowledge to the stakeholders' network through redefining, re-describing or reinterpreting stakeholders joint interests (Freeman *et al*, 2012). Stakeholder management is built on a partnering mentality that involves communicating, negotiating, contracting, managing relationships and motivating. The approach discerns three to five phases of engagement or levels of impact: informing, consulting, involving, collaborating and empower (Wijnands, 2011; Freeman *et al*, 2010). The process in which the stakeholder increasingly adapt the ownership of the new knowledge, step by step through the phases of engagement, is called stakeholder enrolment. The enrolled stakeholders internalises the new knowledge and is willing to

influence others in their network (Wijnands, 2011). The key feature in the Agromere 'Arena' was the stakeholder analysis, in which the Agromere team identified each stakeholder's interests and positions towards bridging the boundaries in Almere Oosterwold. The stakeholder analysis was utilised as starting point of the 'Arena', as well as a periodically repeated feature during the 'Arena' period.

To structure the stakeholder engagement process the Agromere 'Arena' the team used the DEED framework: Describe, Explain, Explore and Design (described in: Visser *et al*, 2009). In the consecutive phases of the DEED framework the team used different methodologies and approaches (Visser *et al*, 2009). The 'Arena' consisted of interviews, workshops and design ateliers with the stakeholders and backed up with research input from the Agromere team.

An in depth understanding of the stakeholders' (joint) interests and its origins could help to create these "trusted weak ties" within the Agromere 'Arena'. The Agromere team presumed that understanding the stakeholders' interests will increase the room for manoeuvre in the 'Arena'. And hence, an increased chance that the shared new knowledge will be transferred to and used in the networks of the stakeholders.

### **Agromere 'Arena'**

Agromere is situated in the Dutch city of Almere. Almere is a new and rapidly growing suburban city in the province of Flevoland, 30 km east of Amsterdam, with 185,000 inhabitants in 2009 (Figure 1). Founded in the 1970s, the layout and design of this polder city is completely different from other Dutch cities. The original poly-nuclear design of Almere, inspired by the English garden cities of Ebenezer Howard, is unique in the Netherlands (Remmers, 2011). Almere is expected to expand to 350,000 inhabitants by 2030 because of the growing need for new housing in the Amsterdam and Utrecht areas. This expansion plan is called the Almere 2.0 program. Part of Almere 2.0 is the development of 15,000 new houses on approximately 4,000 ha farmers land Northeast of Almere, the so-called Almere Oosterwold area (Figure 1). Almere Oosterwold is partly situated on land of the neighbour municipality of Zeewolde.

The objective of the Agromere 'Arena' was to acquire knowledge on how agriculture could be fully integrated in the city life of Almere Oosterwold. But at the same time the goal was to influence the stakeholders in the Almere Oosterwold area to bridge actually the boundary between urban and

rural environment in Almere Oosterwold. In the Agromere 'Arena' urban agriculture was synonym for bridging the boundaries between the urban and rural environment.

No one had at the start of the Agromere 'Arena' a clear idea about bridging the boundaries or how urban agriculture could settle in Almere Oosterwold. Thus, the Agromere team started in 2005 with one or more separate interviews and conversations with potential stakeholders. The goal of these interviews was to inform the stakeholders, to identify stakeholders interest and positions, and to get them involved in the Agromere 'Arena'.

After the first round of interviews, the stakeholders who got involved in the Agromere 'Arena' represented local farmers, the municipality of Almere and its neighbouring municipality Zeewolde, nature and two environmental organisations (NGO's) and a consortium of commercial project developers. These stakeholders can be seen as interlocutors of the networks with vested interest in the Almere Oosterwold area. The next phase in creating more engagement within this group of stakeholders was the Future Scenario's approach. The Future Scenario's approach are based on the assumption that it is important to develop systems or designs which are prepared to deal with future uncertainties, rather than to build on known certainties (Van der Heijden, 2005). Almere and the role of urban farming in this development. Prior to the two workshops, all stakeholders were interviewed to ascertain possible uncertainties in the development of Almere Oosterwold and the role of urban farming in this development. In the first workshop, the different stakeholders jointly explored how agriculture and city development could be integrated under four different future scenarios (Visser *et al*, 2009).

Prior to the second workshop the Agromere team explored the impact of the four future scenarios, on the available resources (land and water), on the role of urban agriculture and the extent to which it meets the cities' future ambitions and claims. The results were discussed in the second workshop to verify if the right assumptions were made. The result of this intervention was that all stakeholders jointly agreed that only two of the four future scenarios were realistic for the development of Almere Oosterwold. They asked the Agromere team to integrate these two scenarios and to downscale the image to the level of a virtual township: Agromere. Subsequently the design principles for urban agriculture in this township Agromere, like 'the urban farms in Agromere are commercially healthy enterprises' and '50% of the produced food could be consumed in the township', were developed and agreed upon with the stakeholders at the start of the 'Arena'. During the third workshop the virtual township Agromere was presented to and

discussed with the stakeholders. All stakeholders present at this third workshop stated that the most important result was the development of and consensus regarding to these design principles of urban agriculture (Visser *et al*, 2009).

After the three rounds of workshops (mid 2008) all stakeholders recognised the added value of urban agriculture for the Almere Oosterwold area and were involved in the concept. At the same time the municipality of Almere, commissioned by the national government and in cooperation with regional partners with the outlines of Almere 2.0 program. These outlines would set among others the foundation of the Almere Oosterwold area. The first step in this program was to produce a draft strategic vision by mid-2009. Due to this Almere 2.0 program, the municipality of Almere was the main system for the Agromere team to focus on in the 'Arena' during the period 2008-2009. So through a new round of interviews, internal sessions, personal contacts and contract research the new knowledge, i.e. urban agriculture, was gradually transmitted to the municipalities town hall. This time with help of the stakeholders already involved in the Agromere 'Arena'. Agromere showed the decision makers of Almere 2.0 that urban agriculture could help in realising its ambition to establish a unique (city) area and could contribute to the intended sustainable organic development of Almere Oosterwold. This made that the municipality increasingly internalised urban agriculture and looked for feasible ways to fit urban agriculture in their Almere 2.0 program (i.e. the empower phase). Almere connected urban agriculture to local food production and distribution, to green energy production, local business (leisure, health care, children care) and multifunctional land use. Starting with one person in 2005, the concept of urban agriculture disseminated steadily throughout the town hall. Eventually members of the Agromere team became part of the Almere Oosterwold design team.

### **Impact of Agromere 'Arena'**

The outcome of the design and research 'Arena' is a virtual city district of 250 ha with 70 ha for houses and infrastructure and 180 ha for agricultural activities (Jansma and Visser, 2011). The impact of the design and research 'Arena' is that Agromere inspired the city planners of Almere to include urban agriculture in their plans for the Almere Oosterwold area. In the draft Strategic Vision for Almere 2.0, launched in July 2009, urban agriculture is highlighted as one of the driving forces for the Almere Oosterwold area (Almere, 2009). The city's ambition is to develop this area towards a so-called continuous productive urban landscape producing food, energy, resources and water within and for the city (Viljoen, 2005; Van Oost and De Nood, 2010). Through entrepreneurship and citizens' initiatives this 4,000 ha conventional agricultural polder area should

be transformed into a rural urban area by 2030 with 50% urban agriculture, 30% housing, infrastructure and ditches and 20% public green (Almere, 2011). The city is now working on a development strategy to realise this ambitious transformation.

## **Discussion**

Could applied agricultural researchers play a role in bridging the contemporary boundaries between the urban and rural environment, was the central question in this paper. The Agromere research and design 'Arena' (2005-2009) shows a successful first step in bridging these boundaries in the Dutch city of Almere. The Agromere 'Arena' was initiated and carried out by a team of researchers of applied plant research of Wageningen UR. The Agromere 'Arena' interfered with the existing networks in Almere using the stakeholder management approach of R. Edward Freeman (Freeman *et al*, 2010). The 'Arena' consisted of interviews, workshops and design ateliers with the stakeholders and backed up with research input from the Agromere team. Like many multi-stakeholder processes, the Agromere 'Arena' required careful, solid and energetic management from the Agromere team and its process managers (Jansma and Visser, 2011). The stakeholder analysis helped to guide for the different methodologies and approaches to intervene in the process.

To interpret the value of the stakeholder approach in the Agromere 'Arena', the work of Mark Granovetter on the relation between interpersonal ties and information transmitting between social networks is used. According to Levin and Cross (2004), trusting an actor as knowledge source is the key factor in transferring complex or tacit knowledge. They call ties like this "trusted weak ties". In the Agromere 'Arena' we tried to construct an atmosphere in which this trusted weak ties could operate in order to foster transmitting of knowledge between the networks in Almere Oosterwold. The stakeholder approach helped to create this 'trustful' atmosphere.

During the Agromere 'Arena' period the ownership of urban agriculture spread into different communication systems within the Almere boundaries and beyond. Agromere 'Arena' fuelled importantly the municipality of Almere to incorporate urban agriculture in the development of the Almere Oosterwold area. In stakeholder engagement terms the municipality got empowered. But also a nature organisation and last but not least Applied Plant Research (Wageningen UR) adapted the new information in its system. The Agromere 'Arena' derived at the same time knowledge on how to integrate agriculture in a city's district.



Trusting a stakeholder as knowledge source is the key factor in transferring new knowledge, suggesting that the role of applied research could lay in creating a 'trustful' atmosphere using this stakeholder management approach. Could this 'trustful' atmosphere be designated? Johnson, (cited by Regeer *et al*, 2011: 56) identified seven patterns that provide rich spaces for development:

1. The adjacent possible; new ideas are often combinations of existing part of other domains,
2. Liquid networks; ideas are not isolated, they are like a swarm,
3. The slow hunch; an "aha erlebnisse" often emerge when an idea that has been kick around for years is combined with other ideas,
4. Serendipity; ideas need to be able to bump into each other and make happy accidents,
5. Error; being wrong forces you to explore,
6. Expatiations; take something that emerges from one use and repurpose it for another,
7. Platforms; platform-building is about emergent behaviour.

Most of these conditions apply to the Agromere 'Arena'. The core of these conditions is to share, bump, combine, reuse and explore ideas with the stakeholders. Or as Regeer *et al* (2010: 16) put it: a connected value development is often initiated outside of current institutions in a newly created free space where actors jointly co-create new values. The Future Scenario approach presumably helped to create this free space. The Future Scenario approach was an effective intervention to stimulate the stakeholders to leave their present stakes and current disagreements out of the 'Arena' since these often are coupled with the reality of today (Visser *et al*, 2009). It is important to emphasize that the future images developed were not the goal itself but rather used for inspiration.

We think this 'trustfull' atmosphere is a tailor-made free space dependent to the environment in which to operate. The stakeholder analysis helped to explore and to understand the systems and environment in which they sway. This created an instant setting of understanding. It helped to attune urban agriculture to the interests of these stakeholders. The stakeholder approach helped to manage the unpredictable, to direct the serendipity. For example, the installation of a new city board in 2006 provided an unexpected advantage. The new ambitious alderman responsible for the city's development plans (Almere 2.0) became the initiator of the seven Principles for a

sustainable development of the city (Almere, 2008). Right after taking office he was presented, in the presence of the main stakeholders in the Agromere 'Arena', with the first copy of a brochure on the Agromere project. This intervention, and his speech afterwards, in which he embraced the idea of reconnecting city and farming, were crucial in generating more support from the stakeholders.

The multidisciplinary character of the 'Arena', with different values, angles and solutions, created subsequently a common knowledge of urban agriculture in the Almere context. It helped that none of the stakeholders had an idea of what urban agriculture be nor the role it could play in their interest. So none of the stakeholders could influence the process in advance.

The complex knowledge (connecting city and agriculture) was transmitted and internalised within the Almere's town hall. To achieve this high level of trust, the Agromere process managers themselves became part of the inside of the municipality's network, as interim transmitters of this complex information. In this way the stakeholder management tools were helpful to anticipate the dynamics of the municipality. Being a trusted part of the communication system, the process managers could provide the civil servants with the needed information to diffuse the concept of bridging the boundaries between urban and agriculture through the system.

Although the signs are positive towards bridging the boundaries in Almere, both in the town hall as well as in other segments of the city, the knowledge is virtual and it still depends on few stakeholders within Almere. Not all stakeholders in the Agromere 'Arena' have the same level of engagement as the municipality. To base this still fragile success into an more enduring processes a new cultural repertoire is needed in Almere (Remmers, 2011). To establish this repertoire, i.e. to develop and incorporate sustainable processes and results, within existing communication systems in Almere, four partners, Applied Plant Research of Wageningen UR and Almere university of applied sciences (CAH) among others, initiated recently the Almere Development Centre for Urban Agriculture (OSA). The Centre works with a portfolio approach. On the operational level it stimulates, integrates and initiates individual business cases. Parallel on a more strategic level the centre strives to generate conditions for urban agriculture in a broader sense, like an urban food strategy. To link both levels, a knowledge and learning environment is created (Remmers, 2011). The Agromere "Arena" actually has evolved, with the foundations of this Centre, evolved to a next level "Arena". It will help to improve the flow of knowledge and experience on urban agriculture between and within the Almere networks. The boundaries between urban and agriculture have been bridged.....



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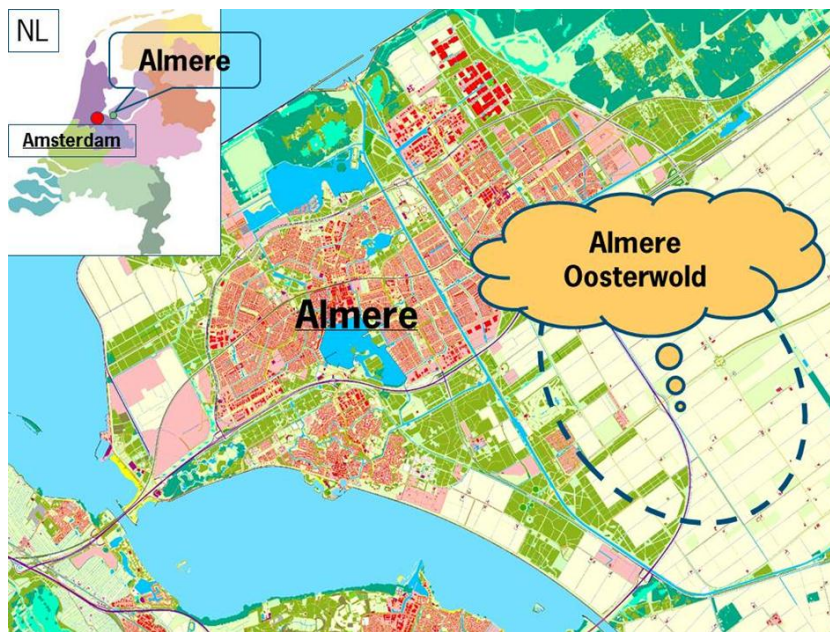
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**Figure 1.** Almere is a so-called New Town in the province of Flevoland, situated 30 km east of Amsterdam, with 185,000 inhabitants in 2009. Part of a recent expansion plan, the Almere 2.0 program, are 15,000 new houses on approximately 4,000 ha east of the city: Almere Oosterwold.