



## Taking stock –

### Three years of addressing societal challenges on community level through action research

### Pilot specific synthesis report

WP 4 – Scenario and back-casting exercises by three communities: pilot projects  
Deliverable 4.5 – Pilot specific synthesis report, including improved approach format

THEME FP7 – ENV. 2010.4.2.3-1: Foresight to enhance  
behavioural and societal changes enabling the transition  
towards sustainable paths in Europe.

Grant Agreement number: 265191



## **ACKNOWLEDGEMENT**

The research leading to these results has received funding from the European Union FP7 ENV.2010.4.2.3-1 grant agreement n°265191.

## **AUTHOR(S)**

Julia Wittmayer, DRIFT

Mirijam Mock, SERI

Frank van Steenberg, DRIFT

Stefanie Baasch, UFZ

Ines Omann, SERI

Niko Schöpke, HNEE

with contributions by Rosanne Winterwerp (DRIFT) and comments by Felix Rauschmayer (UFZ)

Manuscript completed in September 2013.

This document is available on the Internet at: [www.incontext-fp7.eu](http://www.incontext-fp7.eu)

---

## **DISCLAIMER**

Neither the European Commission nor any person acting on behalf of the Commission is responsible for the use which might be made of the following information. The views expressed in this publication are the sole responsibility of the author and do not necessarily reflect the views of the European Commission.

Reproduction and translation for non-commercial purposes are authorized, provided the source is acknowledged and the publisher is given prior notice and sent a copy.

# Table of Contents

- 1 Introduction..... 5**
  - 1.1 Goal and structure of the deliverable..... 7
- 2 Project context..... 8**
  - 2.1 The role of the researcher ..... 8
  - 2.2 Co-funding..... 9
  - 2.3 Sustainability and concepts that matter locally..... 12
  - 2.4 Closing remarks..... 17
- 3 The process: lessons for the methodology ..... 18**
  - 3.1 Which scale or what is a community? ..... 18
  - 3.2 Adaptations to the methodology ..... 19
  - 3.3 Closing remarks..... 24
- 4 Inner Context ..... 25**
  - 4.1 Aim and background ..... 25
  - 4.2 Defining core concepts ..... 25
  - 4.3 Analysis of core concepts ..... 30
  - 4.4 Closing remarks..... 33
- 5 Outer context ..... 35**
  - 5.1 Organization of the community arena and leadership ..... 35
  - 5.2 Community arena and the political context..... 38
  - 5.3 Community arena and the wider community ..... 41
  - 5.4 Closing Remarks ..... 43
- 6 Synthesis..... 45**
- 7 References ..... 48**

**Figures**

Figure 1: Overview of InContext pilot projects and case studies .....6

**Tables**

Table 1: The intensity of the process in the three pilot areas ..... 10

Table 2: The use of the concept of sustainability in the pilot projects..... 14

Table 3: Analysis of all three vision documents along the four dimensions of sustainability ..15

Table 4: Phases of the Community Arena ..... 19

# I Introduction

The original objective of the InContext project was twofold: firstly, to better understand how sustainable lifestyles are shaped by an interplay between outer context (e.g. social norms, policies, and infrastructure) and inner context of individuals and groups (e.g. values and beliefs). The second objective was to develop innovative action research methods for initiating change in local communities.

Once the project started in October 2010, the research context had changed: the economic crisis had started to impact everyday life and banks had become state-supported. On the other hand, local initiatives such as transition towns and local currencies were mushrooming. Communities all over the globe recognized their potential in addressing the societal challenges at hand. Policy makers with empty pockets turned towards concepts such as civic power and ‘Big Society’. This changing outer context also led to a change in the framing of our research project. Rather than focusing on sustainability as such, we were focusing on how the transformative potential of communities in addressing societal challenges can be enhanced. The focus went thus from a focus on sustainability and sustainable behaviour as a goal to a focus on the capacity of individuals and communities in dealing with societal challenges. In the tradition of the sustainability transitions research (Grin et al. 2010), these challenges are seen as symptoms of the unsustainability of the societal system.

Within InContext we searched for answers by turning to theory, case studies and action research. By using action research, a rather unconventional research approach, InContext was also experimenting with new forms of transformative science. The latter combines systemic thinking with inter- and transdisciplinarity and *“supports transformation processes in practical terms. It does so through the development of solutions and technical as well as social innovations, including economic and social diffusion processes and the possibility of their acceleration”*. (WBGU 2011: 322). The action research approach in InContext was based on a methodology referred to as community arena methodology that integrates insights from transition management, backcasting and social psychology (see section 3). As part of the methodology, a selected group of individuals is guided in discussing their understandings about the current situation, commonly imagine a possible wished for future and devise pathways to reach this future. The imagined future is put into practice through (a number of) experiments or projects.

This deliverable is the synthesis report of the action research work package that makes up the balance of three years of researcher engagement with local communities in Carnisse (a neighbourhood of Rotterdam, the Netherlands), Finkenstein (Austria) and Wolfhagen (Germany) – see the map in figure 1. We are however confined in our ability to draw general conclusions in how far the action research contributed to enhancing the communities’ transformative potentials on the basis of three pilot projects only. Rather, this deliverable focuses on describing the particular action research approaches in depth: The approach through which the transformative potential of specifically Carnisse, Finkenstein and Wolfhagen should be enhanced and its specific outcomes. Based on our empirical material and within the theoretical frame of the InContext project, we analysed the influences of the action research approach on the inner and outer context of individuals and communities and

studied to what extent this approach could create supportive conditions for the enhance of transformative potential.



Figure 1: Overview of InContext pilot projects and case studies

## 1.1 Goal and structure of the deliverable

Rather than relating our overall work to on-going work in the field, the goal of this deliverable is more inward focused. It is to analyse and compare the outcomes of the three pilot projects along a number of points, namely the project context, process, inner context and outer context. By doing so, we build on on-going discussions and work of others relating to our conceptualisations of the inner and outer context as influencing the transformative potential of communities.

First, we situate the research in its local context so as to provide the reader insight into the context in which the pilot projects were implemented in the three communities. In the section '**project context**' (section 2) we reflect on the role of the researcher, the sustainability terminology as well as the role of co-funding and the influence of these on our research. After having introduced the reader to where and under which circumstances the research was done, we aim to present how it was done. Having drawn up methodological guidelines in earlier work (Wittmayer et al. 2011) we describe in section 3 on '**the process**' the initial methodology as well as its application in the three communities and propose adaptations in the light of this application.

From here we go into the substantial part of this synthesis report, the sections on inner and outer context, presenting and discussing research results.

According to the proposal planning that was submitted four years ago, the action research should have implemented a 'needs and capability approach' as outlined in the 'theory work package' (Schäpke and Rauschmayer 2011) to better understand how the context interrelates with individual and collective strategies or practices. This did not happen for a number of reasons, one being that concepts different than the initial concepts of 'needs and capabilities' were considered more meaningful in our work in the pilot areas. These are the concepts of 'social learning', 'empowerment' and 'social capital'. In section 4 we critically reflect on this shift of concepts used for understanding the '**inner context**'. Furthermore, we discuss the effects of the pilot projects on facilitating social learning and empowerment of participants and on building social capital.

Section 5 focusses on insights gained with regard to the '**outer context**', namely organization and leadership of the community arena group, as well as its relations to the political context and the wider community. To enrich this analysis, we relate the outcomes of the action research to the four case studies analysed as part of InContext (Debourdeau et al. 2012, see also figure 1). These have looked at and described local initiatives aiming at establishing alternative, more sustainable practices in the domains of food and energy. This provides insights on differences and similarities between pilot projects facilitated by action research and existing initiatives.

In the last chapter, the '**synthesis**', we reflect on whether the community arena helped to enhance the transformative potential of the communities in Carnisse, Finkenstein and Wolfhagen and if so under which conditions. Here we also link the inner and outer context discussions.

## 2 Project context

In this section we introduce a number of issues that are related to the project context and influenced the outcomes of our research. This includes our approach to research (action research), the funding structures of the process (co-funding by third parties), and our way of addressing the concept of sustainability. This gives the reader an idea of the circumstances under which the pilot projects took place and thereby enhances the transferability of the findings of this research.

### 2.1 The role of the researcher<sup>1</sup>

As part of the pilot projects we used an action research methodology so as to empower individuals and communities on a local level, while enriching the understanding of how inner and outer context interrelate in forming the context for sustainable behaviour of individuals and communities.

Action research is a broad field spanning approaches to collaborative research from different traditions, such as political economy, pragmatic philosophy, community development, education, participatory rural development. According to Greenwood and Levin (2007) what all these approaches have in common is that they cover three elements: action, research and participation. In action research, the term 'action' refers to the real-world change the researchers and the participants aim for (Kemmis 2010). 'Research' refers to the new scientific knowledge that is generated in a participatory way: scientists work *with* people and practitioners rather than *on* or *for* them and thereby bring together different types of knowledge. In general, action research is the collaborative production of scientifically and socially relevant knowledge through a participatory process. A number of key challenges may arise during this process, as discussed by Wittmayer et al. (2013a), namely: self-inquiry, ethics, role of the researcher, opening and dealing with communicative space as well as power differences.

The role of the researcher in InContext was different from the role in other conventional research projects, as well as in comparison with the other work packages within InContext. In the following we introduce this role of the action researcher by focusing on the relation with the community arena group (the group of inhabitants that we worked with in each of the communities). In all three pilots the researchers were facilitating, moderating, and acting as a networking node. They framed themselves as action researchers in Carnisse and Wolfhagen, and as action researchers with a normative stance in Finkenstein. In Finkenstein, there were differences within the team on how they perceived their role. In general they saw themselves as a host accompanying a process (reflecting the focus on empowerment). However, while some perceived themselves as experts steering the process, others declined

---

<sup>1</sup>For a more detailed analysis of the role of the researcher in the pilots and action research for sustainability, see Deliverable 5.2 of the InContext project (Wittmayer et al. 2013a).



this view. The research teams framed their boundaries on different occasions. In Wolfhagen, for example, the research team affirmed straight from the beginning that there were no resources for implementation as part of the project, and it also had to decline when the question arose asking for a similar process in another village.

While co-financing allowed for some additional work in Carnisse and for a better linking with politicians and public administration in Finkenstein, it also influenced the perception of the role of the researchers (see also section 2.2). In Finkenstein, some local government members and also the informed public perceived the researchers as regional managers, expecting development and implementation of clear and concrete measures in order to contribute to the further development of the village and region (e.g., knowledge about subsidies, making concrete project plans). Eliciting these result-oriented expectations and combining them with the community arena process, which did not start with measures but the establishment of a common understanding of the present and the envisioning of a desirable future, is important in the beginning of the implementation. The expectations resulted in sometimes difficult and stressful situations for the research team who felt that at times the research was not as prominent as it should be.

The researchers in Carnisse were labelled 'activating researchers' by the participants, whereas the researcher in Wolfhagen was perceived as activator and researcher with local expertise. Also important in shaping the perceptions of the research team is whether the researcher is living in the community. In Carnisse, after collaboratively presenting the vision to a broader public, the first question the researchers received was whether they live in the neighbourhood. A negative answer to this question leads to a loss of credibility and legitimacy in the eyes of most inhabitants. Interestingly enough, the community arena participants spoke up for the research team, establishing a place-independent legitimacy. In the Austrian pilot, the research institution is based in Vienna, some 400 km from Finkenstein, so the actual and perceived distance was huge. In the beginning, this was expressed through the insistent use of the academic titles of the research team members. The fact that the researchers were not from Vienna but from other, closer provinces or even from Carinthia (true for two team members) and therefore spoke the local dialect helped remove some of this distance. During the project the distance was not an issue anymore, because the participants appreciated the work of the research team and because the researchers were often in Finkenstein.

To sum up, the research approach taken in the pilot projects is based on principles of action research, where the researcher does not have a passive observer role but where he or she actively supports a group of inhabitants to elicit local challenges, a sustainable future as well as implement actions for realizing this future.

## 2.2 Co-funding

The three pilot projects had different starting points with regard to the available funding which had implications for the intensity of the process as well as the embedding of the process in local structures.

	<b>Finkenstein</b>	<b>Wolfhagen</b>	<b>Carnisse</b>
<b>Project-internal Output [artefact/objects]</b>	<ul style="list-style-type: none"> <li>- Minutes of 64 actor analysis interviews</li> <li>- Minutes of 5 arena meetings</li> <li>- Minutes of 3 transition team meetings</li> <li>- Minutes of 3 networking meetings</li> <li>- Minutes of 8 monitoring interviews and the evaluation meeting</li> <li>- Data generated by online evaluation questionnaire</li> </ul>	<ul style="list-style-type: none"> <li>- Minutes of 10 actor analysis interviews</li> <li>- Minutes of 3 arena meetings</li> <li>- Minutes of 7 monitoring interviews and the evaluation meeting</li> <li>- [3 self-organized meetings by the group without the research team]</li> </ul>	<ul style="list-style-type: none"> <li>- Minutes of 48 actor analysis interviews</li> <li>- Minutes of 7 arena meetings</li> <li>- Minutes of 6 action arena meetings (community centre working group)</li> <li>- Minutes of 1 broadening event (plus preparation meeting)</li> <li>- Minutes of 12 monitoring and evaluation interviews and the evaluation meeting</li> </ul>
<b>Project-external Output [artefact/objects]</b>	<ul style="list-style-type: none"> <li>- Several blog posts on the 'Lebensklima website'</li> <li>- Facebook page "LebensklimaFinkenstein"</li> <li>- 2 articles in local newspapers</li> <li>- 2 articles in community newspaper</li> <li>- 1 vision completed and launched in a public event: FinkenStern</li> </ul>	<ul style="list-style-type: none"> <li>- 1 article in local newspaper</li> </ul>	<ul style="list-style-type: none"> <li>- 26 blog posts on the Veerkracht website</li> <li>- 1 article in local newspaper</li> <li>- 1 article in municipal newspaper (in preparation)</li> <li>- 1 vision completed and launched in a public event: Bloeiend Carnisse</li> <li>- 1 business case for a community centre</li> </ul>
<b>Project-external Output [actor involvement and activities]</b>	<ul style="list-style-type: none"> <li>- 10-15 participants at each of the 5 community arena meetings</li> <li>- Around 60 participants in 8 working groups</li> <li>- 3 broadening events (network meetings) with each around 30 participants</li> <li>- 8 workshops as activities of the working groups with each 10 – 30 participants</li> <li>- 8 measures have been implemented or are in the implementation process</li> <li>- An institutional structure for further implementation of the vision has been build</li> </ul>	<ul style="list-style-type: none"> <li>- 5-11 participants at each of the 4 community arena meetings</li> <li>- 5-8 participants in 1 working group</li> </ul>	<ul style="list-style-type: none"> <li>- 5-18 participants at each of the 7 community arena meetings</li> <li>- 4-30 participants in each of the 6 action arena meeting groups</li> <li>- 1 broadening event with about 100 participants</li> <li>- A re-opened community centre under self-management by a foundation run by inhabitants</li> </ul>

*Table 1: The intensity of the process in the three pilot areas (as of May 2013)*

For the pilot of Wolfhagen, only the funding of the European Union in the scope of the InContext project was available. There was support in kind by the local municipality in that they offered a room for the meetings. In Wolfhagen, one participant considered it positive that there was no extra money for implementation from the beginning because this could have been a reason for people to join only because they are interested in the money. Additionally, the participants considered it as a positive fact that the exclusive funding was from the EU and hence in their reading “neutral”, rather than being guided by political interests. This led to a feeling of equality with the participants. However they were considering to approach the municipality, which was supportive of the process, for some follow-up money.

Both, the research teams in Finkenstein and in Carnisse could fall back on co-financing but the conditions differed. In Finkenstein, the research institute asked the municipality beforehand to support the project InContext through co-financing, i.e. the provision of a budget to implement the vision developed in the process. For Finkenstein this meant that the municipality was interested and formed a policy team, which was not the case in the other two pilots. While some political parties were very critical and considered it a waste of money, others were very positive. This direct connection to the municipality influenced the process dynamics and, for example, led to the arrangement of network meetings where the arena group and the policy team met (see also section 5.2).

In Rotterdam-Carnisse, the research team could match the resources of InContext with resources of a second project, which showed some overlap in terms of activities. This project, Veerkracht Carnisse (‘Resilience Carnisse’), is funded by the national government who invests money in so called focus neighbourhoods amongst others Carnisse. The money is distributed via the municipality of Rotterdam. Both the municipality as well as the district municipality of Carnisse are focusing on quantitative rather than qualitative outcomes. While the partners in the Veerkracht project were passive members of the transition team, the district municipality was kept informed by the researchers. The co-funding allowed the research team to include some extra activities, to be more flexible with regard to playing into local dynamics and to follow up on the process, as the Veerkracht funding is available until mid-2015.

The dynamics of the process are clearly shaped by co-financing funds and their nature. It can mean that the municipality or other project partners show interest and commitment in the process and its outcomes. On one hand, this might increase the relevance of the process and its outcomes as well as its embedding in on-going processes and institutions. It can also lead others to join into the process of change and adopt (part of) the systemic perspective that the group worked on or it can provide the organising team with additional resources in organising the process. On the other hand, it might also introduce power imbalances or political tensions, money-oriented interests or dependencies as well as influence the way others perceive the research team.

Co-financing, amongst other factors (i.e. governance context, personal commitment of researchers), also led to a difference in the intensity of the process in terms of commitment of other actors and in terms of meetings (see Table 1). The process was least intense in

Wolfhagen, where participants had indicated to prefer a “concentrated” process (as phrased by a participant in a meeting). The level of intensity in Carnisse was roughly as expected, based on the methodological guidelines. However, researchers in Carnisse could add a number of moderated action arena meetings as well as a public broadening event which were not foreseen in the initial guidelines (see Section 3 on the process methodology). Finkenstein had the most intensive process as it had several working groups that resulted from the community arena process as well as other kinds of meetings, namely transition team meetings and network meetings. Here the co-funding and the governance context led to a heightened interest and commitment by political actors, while it allowed only for minor additions. A process with a higher intensity, meaning more time spent at the pilot project site as well as with the community members, allows for faster and more in-depth trust building. It also supports the development of local expertise, through a more in-depth system and actor analysis. This is especially important when the research team does not know the community beforehand. Finally, it allows the research team to play into local dynamics in a more flexible manner as it allows, for example, to have additional sessions or interviews if needed.

To sum up, co-funding creates opportunities for a more intense process (both in terms of commitment and interest of other actors as well as of number of meetings) and for increased exposure. At the same time it increases the need for accountability (not only to the additional funders but also to other stakeholders) and the possibility of critique as the process might be seen as the playing field of different interests.

## 2.3 Sustainability and concepts that matter locally

Transition processes do not automatically lead to sustainability, although an adequate facilitation may work in favour of it (e.g. Rotmans and Loorbach 2009: 2). To facilitate a community arena for sustainability, one might first want to define what sustainability means. As with many other normative concepts (e.g. justice, human rights), sustainability is in itself an inherently ambiguous and contested concept. Neither the scientific community nor society agrees on what sustainability means. At the same time, support and funding are made available to achieve sustainability. This contradiction is mirrored in the InContext project. It was funded under the EU call for “Foresight to enhance behavioural and societal changes enabling the transition towards sustainable paths in Europe” with the aim of: *“fostering pathways to sustainable behaviour and the development to more sustainable communities”*. Members of the InContext consortium have different understanding of this term, a diversity that can be explained by varying backgrounds and different research paradigms or personal history, among other things. The InContext consortium had a number of discussions on the meaning of the term, as well as on the way it should be used within the project as a whole and within the pilot projects in particular. This did not, however, lead to one fixed definition or one single idea of what sustainability means or should mean. On the contrary, a plurality of ideas persisted with common denominators, e.g. long term thinking.

A predefined sustainability goal with targets for the pilot projects would be counterproductive to the idea of having an open agenda for the process. Because of the ambiguity of the

concept, the impossibility of monitoring outcomes (such as behavioural change or its impacts on individual or community level) within a three year research project and the need for a locally emerging understanding, the community arena approach focused on sustainable development as a process (as opposed to a pre-determined ultimate goal). The processes were conceived as learning journeys which render the concept meaningful in the local context. This learning journey is based on principles of diversity, adaptability and open-endedness on the one hand, and a focus on innovation, alternative solutions and a commitment to a broadly understood goal of sustainability on the other. Harmonizing well with the initial open-endedness of the action research process, the concept and term of sustainability was not introduced explicitly in the pilots for a number of reasons. Firstly, the concept has a negative connotation for some people who make the assumption that they will have to give up certain things or that they themselves are not in the position to change anything. The WP4-team felt that evoking this connotation would prove counterproductive at least in two of the three pilots (Carnisse and Wolfhagen), and not activate or empower participants. Secondly, some people consider 'sustainability' an academic and abstract term, rather than an everyday concept that they can relate to. As such, the WP4 team considered it to be less meaningful in the local context. Thirdly, sustainability is considered by some a worn-out term and its operationalization is often vague.

Rather than focusing on the term and concept of sustainability, the community arena process aimed to play into local dynamics and was centred on a good quality of life for all now and in the future – herewith hoping to catch the essence of sustainability without falling into quarrels about the notion itself. The researchers operationalized the concept of sustainability in four dimensions:

- 1) environmental thinking (awareness of nature and natural resources),
- 2) social thinking (consideration and acknowledgement of self and others),
- 3) time horizon (short and long term) and
- 4) interregional thinking (connection with other parts in the world, near and far).

These dimensions of sustainability thinking were to be used in the facilitation of the processes (Wittmayer et al. 2012). For the action research practice, this meant that the researchers provided space to the participants to decide what was important for them and for their community locally. The attitude was not to impose any preconceived ideas or values of sustainability onto the participants, but rather to organize a process that makes sustainability meaningful locally; the four dimensions were used to motivate people thinking into these directions.

In Finkenstein, the term was used in the process of finding a community for the pilot study as sustainability is an important issue for Austrian policymakers. It therefore made sense to use the term in the negotiations with the council and in the public kick off workshop, where the project was presented to over 100 people. As mentioned previously, this term means very little to some people, while for others it is important to use it. However, rather than using the term intentionally in the process, the four dimensions were used and some community arena participants referred to it by themselves. For a comparative overview of how the action researchers used the concept in the three pilots, and why they did it this way see Table 2.

	<b>Wolfhagen</b>	<b>Finkenstein</b>	<b>Carnisse</b>
<b>Use of the term 'sustainability'</b>	Sustainability was used explicitly only during the introductory event. Participants could define the biggest local challenges as the basis for working on a transformation. The four dimensions were mentioned in the discussions. The ideas that emerged can be framed under the three pillars of sustainability: social, environmental and economic aspects.	Sustainability was not explicitly used in the process, except at the kick-off workshop. The aim was to reach a good life for all, now and in the future. This was done by using the 'needs' concept, which involves trying to define lifestyles together with the participant by guiding them and asking 'what do you need to be happy and to feel well?' The project was called 'SERI' referring to the research institute running it, which has the notion of sustainability in it (Sustainable Europe Research Institute).	Sustainability was not introduced explicitly. The focus of the process was on what life should look like in Carnisse in 2030. During the facilitation the four dimensions of sustainability were used to evoke 'sustainability thinking'. At the same time, the researchers adapted their language to the language of the people involved and the focus was on providing space for outlining what was important for the future of the neighbourhood.
<b>Reasons of the research teams for using it this way</b>	In Germany, inspiring experiences with sustainability are rare (during the local agenda 21 processes). The researcher estimated that thinking in terms of the three pillars of sustainability (ecological, social, economic) would be difficult for participants. There was lot of criticism on the use of the term, not the concept.	'Sustainability' does not touch people in their inner dimension as it is a technical term; 'good life' is a much more inspiring term.	The research team estimated that working with people for their benefit works best when one refrains from telling them what is good for them or for the world and what they should do. The goal was rather to start a shared thinking process which leads to tangible activities and is based on common knowledge of all involved, including the researchers.

*Table 2: The use of the concept of sustainability in the pilot projects*

The term sustainability was thus not prominent in the process of the three pilots. We look at three things in order to see to what extent the four dimensions that were used in the facilitation of the process also had an influence on the outcomes of the community arena. Firstly, we explore how the four sustainability dimensions can be traced back in the visions<sup>2</sup> (see Table 3) and secondly the implementation projects of the pilot areas. Thirdly we present a self-evaluation of visions and planned activities done by the community arena participants with regard to the four sustainability dimensions.

---

<sup>2</sup>For the vision of Wolfhagen, the main points are derived from the vision document Wolfhagen 2030, and additional information is retrieved from the 4.3 deliverable.

<b>Dimensions</b>	<b>Vision document: Wolfhagen 2030</b>	<b>Vision document: FinkenSTERN</b>	<b>Vision document: Blossoming Carnisse 2030</b>
<b>Social thinking: consideration and acknowledgement of self and others.</b>	<ul style="list-style-type: none"> <li>• Possibility to find and meet people with shared interests.</li> <li>• Creation of networks for activities</li> <li>• Active and lively/vital city</li> <li>• Inclusive meeting places</li> <li>• Reviving cultural aspects</li> <li>• Generation-spanning living</li> </ul>	<ul style="list-style-type: none"> <li>• Active cooperation in the community</li> <li>• Teambuilding</li> <li>• Binding through culture</li> <li>• Diversity</li> <li>• Sharing with and supporting each other</li> <li>• Living together</li> <li>• Intergenerational living</li> <li>• Politics (transparent, cooperative)</li> <li>• Care places</li> <li>• Creation of participation</li> </ul>	<ul style="list-style-type: none"> <li>• Living together</li> <li>• Social relations</li> <li>• Language and diversity</li> <li>• Helpfulness and respect</li> <li>• Safety</li> <li>• Creativity: thinking beyond the conventional</li> <li>• Activity: individually and in groups</li> <li>• Cohesion</li> <li>• Flexibility in choosing residence</li> <li>• Knowledge building</li> <li>• Inclusive meeting places</li> <li>• Local economy, sharing and employment</li> </ul>
<b>Environmental thinking: awareness of nature and natural resources.</b>	<ul style="list-style-type: none"> <li>• Reduction of traffic: car sharing, carpooling.</li> <li>• Creation of green areas.</li> <li>• Environmental friendly mobility: cycle paths, car free city?</li> <li>• Renewable energy</li> <li>• Greening the surrounding</li> </ul>	<ul style="list-style-type: none"> <li>• Awareness of nature</li> <li>• Preservation, development and improvement of nature</li> <li>• Renewable energies</li> <li>• Alternative mobility</li> <li>• Local production</li> <li>• Working group on sustainable development</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energies</li> <li>• Emphasize nature and how it should be treated</li> <li>• Re-use of space</li> <li>• Greening of the neighbourhood</li> <li>• Natural diversity</li> <li>• Local economy</li> </ul>
<b>Interregional thinking: connection with other parts in the world, near and far</b>	<ul style="list-style-type: none"> <li>• Role model</li> <li>• Expansion of the cycle paths between core city and rural districts.</li> </ul>	<ul style="list-style-type: none"> <li>• Role model for neighbouring regions</li> <li>• Tourism</li> <li>• Infrastructure/ accessibility (roads, public and private transports)</li> </ul>	<ul style="list-style-type: none"> <li>• Attractive neighbourhood</li> <li>• History building</li> </ul>
<b>Time horizon: Connect short and long term</b>	<ul style="list-style-type: none"> <li>• Generation specific aspects (care for elderly, childcare)</li> <li>• Renewable energies</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energies</li> <li>• Preservation of existing resources</li> <li>• Working group on SD including the future</li> </ul>	<ul style="list-style-type: none"> <li>• Renewable energies</li> <li>• Building renovations</li> <li>• Connecting long term thinking and doing in the present</li> </ul>

*Table 3: Analysis of all three vision documents along the four dimensions of sustainability*

Drawing straightforward, meaningful conclusions on the basis of Table 3 is problematic. The researchers used the prompting of the four dimensions in their facilitation in a flexible way and not in a way that makes direct comparison possible – also in this table we only compared the vision documents and did not include an analysis of the vision discussions. From the analysis of the vision documents in Table 3, we can see that aspects of social thinking gain prominence in the future narratives of the three communities. Aspects of interregional thinking were only touched upon. It would be interesting to look further into this

and investigate whether the fact that the community arena process is organized as a place-based process enhances the identification of the participants with the immediate surroundings rather than the global world that this place is embedded in.

We can trace the four dimensions of sustainability thinking not only in the visions, but also in the implementation projects that are initiated by the community arena groups. In both Wolfhagen and Carnisse, the implementation projects, being the opening of community centres, contain aspects of social thinking (communication, social cohesion, social learning etc.), environmental thinking (re-use of existing buildings, promotion of regional products, etc.) while interregional thinking and long-term thinking play a minor role. In Finkenstein, the working groups and the measures that are already implemented or are planned take into account all dimensions except the long-term: social thinking (integration, civic participation, bringing young and old people together, participation workshops, building social capital, a new culture of communication, integration, exchange, etc.), environmental thinking (public transport, bicycle lanes, land use, organic agriculture, renewable energy) as well as on interregional thinking (Finkenstein together with two other communities has recently become a "climate-energy-model region"; an exhibition around the issue of sustainable culture and quality of life is planned with two other regions). From the working groups in Finkenstein, one is prominently named "Sustainable Development" and covers energy, mobility and others topics. The long term thinking is only implicitly part of the projects as they should contribute to better living in the communities now and in the future.

In addition to the visions and the implementation projects, we can turn to the self-evaluation of visions and planned activities by the pilot project participants with regard to the four sustainability dimensions. The participants were asked a few questions with specific reference to sustainability during the evaluation interviews. In Carnisse, most of them indicated that sustainability was very important to them. To them, sustainability mainly refers to the environmental dimension or to aspects of energy saving as well as the long term aspect. For most of the interviewees the vision of Blossoming Carnisse is linking to sustainability, either in its role — hinting towards the future (the year 2030) — or through its topics e.g. housing, green surroundings and being in contact with nature. One of the six pathways of the local vision actually has sustainability in its name: "... green sustainable oasis". In Finkenstein, the participants reported a strong relationship between the vision and sustainable development. The objectives of the vision are focused on a high quality of life for all now and in the future. It is based on gratitude for and awareness of the already high quality of life in Finkenstein, due to good environmental conditions and the positioning of the village in the midst of mountains, with the lake Faak in the middle of the region. The participants are aware of the importance of protecting these local treasures to ensure the high quality of life for a common future. They see also a strong relationship between the whole project and sustainability: 9 out of 15 participants state that the project implements measures that are not just good for the moment but also the far future and that they are not just good for Finkenstein but also for other parts of the world.

The focus in all processes, judging from the visions, the implementation projects and the discussions in the arenas, was on the dimension of social thinking. With the theme being quality of life, the 'social thinking'-dimension was the entry point and led to aspects of the



'environmental thinking'-dimension that emerged at a later stage of the process. Operationalizing sustainability in four concepts was meaningful especially in putting social and environmental thinking on the table. It supported the action researchers in playing into local dynamics (e.g. issues of social cohesion) and linked these to the other three dimensions of sustainability without referring to the term at the outset.

## 2.4 Closing remarks

Initiating a transition process on the local level does not happen in a vacuum. To the contrary, it is embedded and enacted in a highly political and value-laden environment in which human beings make choices that come with consequences and responsibilities. In this section we shed light on some of these choices, namely those relating to our role as (action) researchers and the way we addressed the concept of sustainability. We also clarified the local power context that the processes were embedded in by outlining their funding structures. All these three dimensions have an influence on the research process and by making these transparent we hope to enhance the transferability of our research findings.

## 3 The process: lessons for the methodology

This chapter focuses on the key learning for the community arena methodology and outlines aspects that need further attention when implementing the methodology. It does so by reflecting on the question of scale and community and on the adaptations during the different phases of the community arena methodology. Within each phase, we highlight aspects that played a crucial role in the implementation.

### 3.1 Which scale or what is a community?

Some obvious questions were associated with the community arena methodology: what constitutes a community and what is the scale for putting it into practice? Rather than starting from the concept of a community that is defined by shared values and experiences, we focused on 'spatialised' communities. In all the three pilot projects, administrative and municipal boundaries were used to demarcate the scale of the pilot. For Finkenstein, this implied a rural agglomeration that includes 28 villages (composing together one municipality); for Carnisse, this implied administratively demarcated neighbourhood boundaries of the city of Rotterdam; and for Wolfhagen, this implied a focus on the inner city boundaries of a town that consists of an inner city and smaller satellites. At the same time, drawing up a transition agenda for a community includes discussions on values, experiences and knowledge that might be shared by those living in the area – or not. But a demarcation in terms of scale and spatial boundaries can also be problematic or at least contested in practice.

In Carnisse, the neighbourhood scale has both positive and problematic aspects. We encountered the small scale as positive as people can easily identify with it. They have a sense of ownership in regard to their neighbours, a community centre, etc. At the same time, this small scale can also be problematic. Carnisse is just one out of seven neighbourhoods of Charlois (district municipality), which in turn is part of the municipality of Rotterdam. Not only are there (big) differences between the different neighbourhoods and districts of Rotterdam, the small scale might also be too small to tackle persistent and systematic problems. Therefore, it may be interesting to look at cross-neighbourhood comparisons. For Finkenstein, the scale of a municipality worked well and the administrative boundaries were accepted by all. This was different in Wolfhagen where one of the participants put forth that most of the times the focus is on the inner city at the detriment of the surrounding satellites. The people in the small and surrounding villages would not get such projects as InContext.

Boundaries are necessary from the point of view of putting into practice the methodology. Without boundaries, it is difficult to perform a system and actor analysis. A lack of strict boundaries also poses problems for interviewing, getting people for the transition arena and getting people for the transition team: for example, who should be invited? Furthermore, it is also necessary for the participants involved: for which area, but also for whom is the vision that we draw up? Questioning the boundaries can bring insights for all involved, especially during the problem structuring phase.

## 3.2 Adaptations to the methodology

The methodology that we implemented is based on insights from transition management, backcasting and social psychology and is operationalized in six phases as outlined in Table 4 (see also Wittmayer et al. 2011). It had the ambition to be open and adjustable enough to the context of the different pilot project areas. Throughout the implementation, this flexibility has been tested and proved itself through a number of adaptations that were done so as to make the methodology fit to the local contexts. In the following, some of these adaptations will be outlined.

<b>Phases of the Community Arena</b>		
	<b>Key activities</b>	<b>Key output</b>
0. Pre-preparation	A. Case orientation B. Transition team formation	A. Initial case description for each pilot B. Transition team
1. Preparation & Exploration	A. Process design B. System analysis C. Actor analysis (long-list and short-list of relevant actors) incl. interviews D Set up Monitoring framework	A. Community Arena process plan B. Insightful overview of major issues/tensions to focus on C. Actor identification and categorisation + insight inner context D Monitoring framework
2. Problem structuring & Envisioning	A. Community arena formation B. Participatory problem structuring* C. Selection of key priorities D. Participatory vision building*	A. Frontrunner network B. Individual and shared problem perceptions & change topics C. Guiding sustainability principles D. Individual and shared visions
3. Backcasting, Pathways & Agenda Building	A. Participatory backcasting* & definition of transition paths B. Formulation of agenda and specific activities* C. Monitoring interviews	A. Backcasting analysis & transition paths B. Transition agenda and formation of possible sub-groups C. Learning & process feedback
4. Experimenting & Implementing	A. Dissemination of visions, pathways and agenda B. Coalition forming & broadening of the network C. Conducting experiments	A. Broader public awareness & extended involvement B. Change agents network & experiment portfolio C. Learning & implementation
5. Monitoring & Evaluation	A. Participatory evaluation of method, content and process* B. Monitoring interviews	A. Adapted methodological framework, strategy and lessons learned for local and EU-level governance B. Insight in drivers and barriers for sustainable behaviour

Table 4: Phases of the Community Arena; \* participatory meeting (from Wittmayer et al. 2011)

## Phase 0: Pre-Preparation

The pre-preparation phase is a phase that helps to establish the organisational framework conditions, e.g., obtain additional funding (see section 2.2 on co-funding), or establish the actual team that is implementing the methodology.

From the beginning, the local context played an important role, and a somewhat differing understanding of the role, responsibilities, and composition of the transition team led to three different teams being composed. In Finkenstein, a broad transition team was assembled, including organisational and institutional representatives that could ensure the outcomes are embedded into the local structure. The main task of the transition team was understood as supporting the implementation phase. Due to this understanding, the eager team had a somewhat long idle phase at the beginning of the process. In Wolfhagen, the main task of the transition team was understood as supporting the researcher in the preparation phase. Consequently, the transition team provided information about potential participants and on-going local processes. In Carnisse, the transition team fulfilled both roles, supporting the preparation phase as well as the implementation phase.

The main issue in this phase relates to the **connection of the process to the policy-making and decision-making body**. Political representatives and policy makers can either be directly involved in the transition team and subsequently in the discussions (e.g., Finkenstein), or interact directly with the researchers (e.g., Wolfhagen). Especially in the vision-building process, this risks reducing the debate to one that focuses on budgetary and legal constraints instead of building upon the rich imagination of the participants. Involvement at a later stage (such as during the implementation phase) can be important to ensure follow up (see e.g., the composition of the transition team in Finkenstein). Networking meetings between the broader transition team and the community arena in Finkenstein helped increase mutual understanding and the feeling of “*all being part of the community.*” At the same time, the involvement of representatives, especially if attached to co-funding, can also lead to attempts to influence the process in a certain direction (see also section 2.2 on the advantages and challenges of co-funding, which should be discussed and thought through for each context).

## Phase I: Preparation & Exploration

In all three pilot areas, the interviews and analyses worked well. Interviews were used to enhance or deepen local expertise, get to know key actors, and gain access to potential participants. It was a crucial activity for the rest of the process. Through the interviews, local dynamics became apparent, including diverging or overlapping perspectives which helped with the identification of transition challenges as input for the deliberative arena process. They also were essential in building trust between the research team and the local participants. At the same time, the interviews allowed opportunities to start tangible transition experiments in parallel with the deliberative agenda-building process to be identified (see

phase 4 below for more on this). As outlined above (section 3.1), setting boundaries for the system in question has resulted in necessary discussions.

In this phase attention is drawn to the problematic definition of what constitutes a **'frontrunner'** at the community level. As transition management to date had mainly been applied to transitions on a sectoral level, the participants in the processes were often professionals from different backgrounds and institutions, who as a group covered a number of competencies, interests, and backgrounds. Whilst the methodological guidelines (Wittmayer et al. 2011) formulated some general guidelines for what constitutes a 'frontrunner', it was rather difficult to operationalise this concept at the community level. Taking into account the more intimate relations as well as the existence of a hidden (to outsiders) power structure in geographically bound living environments, researchers had to develop more explicit criteria in selecting participants (e.g., citizens with interesting ideas for the future, entrepreneurs who were active in their neighbourhood) – see also section 5.3.

Both Carnisse and Finkenstein **adapted** the methodology in this phase by adding a pre-event (a so-called 'pre-arena' or 'arena 0') before starting the actual arena process. In Carnisse, the set-up for pitching the idea of the community arena to some frontrunners was small (6 participants). In Finkenstein, a big kick-off session was held (app. 100 attendees) to launch the idea of the community arena and the transition process and to try to get people involved. In both cases this led to a greater sense of involvement and receptivity for the community arena. Another adaptation was the use of (participant) observation at this stage (as well as throughout) as one of the methods for gaining data and access. For instance, in Carnisse participant observation was used to: get a sense for group dynamics, test preliminary results, identify possible conflicts among other objectives.

## **Phase 2: Problem structuring & Envisioning**

The participatory problem structuring helped to get a grip on the local dynamics in all three pilots and was perceived as fruitful, both by the researchers and the participants. It contributed to building local expertise and to a shared perception of problems and sense of urgency. Envisioning a sustainable future was a more challenging task and it proved difficult for some participants to switch to a more utopian and visionary mode of thinking. Some did not think creating utopias is beneficial and instead prefer 'acting now'; others are more accustomed to thinking in terms of current constraints.

The main consideration in this phase goes to the question of **facilitation**, which refers to moderation of the actual arena meeting. This has been approached differently in the pilots. In both Wolfhagen and Finkenstein, the arena meetings were facilitated by one of the senior researchers and an external co-moderator. In Carnisse, the process was facilitated by the two leading researchers. Thus, the researchers also acted as facilitators in all three pilots, but unlike a professional external facilitator, their facilitation was always against the background of the research framework. Having more than one person facilitating or moderating the process enables a better focus on the content and process and makes guided work in small groups possible. The choice of facilitation method or tool as well as the framing of the meetings have a direct link to the way participants experience the process and its outcomes. As one of the aims is to make space for learning and empowerment, the way

the process is experienced is crucial to success with regard to these aims. Assuming that methods used during deliberative meetings should be accepted by the participants, it is necessary to discuss specific methodological approaches and concrete facilitation tools in advance with the participants. This was done explicitly in Wolfhagen and also for the process design in Carnisse. Consulting the participants contributes to a feeling of mutual understanding and comfort, which is a crucial aspect for enhancing open discussions. Facilitating a community arena process, which includes introspection on the part of the participants, requires a number of skills. Next to facilitation skills, knowledge about local conditions and developments (as gained through earlier engagement or the system analysis) is an important asset in directing the process and gaining acceptance by the participants. Having a background in social sciences or psychology certainly enhances the aptitude of the researcher in dealing with the local dynamics (power dynamics, issues of hierarchy, etc.) and may facilitate a critical self-reflection with regard to facilitation style and his or her influence on the outcomes. In addition, being trained in different moderation techniques allows the researcher to select a contextually appropriate or sensitive technique.

Rather than **adapting** this phase, all the pilots enriched it by using different facilitation methods, e.g., simple group discussions, priority/ranking exercises, the dynamic facilitation method<sup>3</sup>. Creative interludes, like writing and performing a stage play, writing a fictional newspaper article, and giving a fictional radio interview led to a more relaxed atmosphere in the community arena meetings and contributed to the clarification and better visualisation of the vision in Finkenstein. In terms of creating a group feeling, having drinks together, taking a group photo, and giving the group a name worked well in Finkenstein and are elements that are mostly underestimated.

### **Phase 3: Backcasting, Pathways & Agenda Building**

This phase is crucial in connecting the long-term and the short-term as well as connecting the deliberation to the activities to be employed (i.e., transition experiments). At the same time, it also proved to be the most challenging phase in the implementation. Questions that arose were: How abstract or how tangible should the pathways be? How many pathways should be defined, which of these should be worked out? In Finkenstein, the backcasting was only successful when it was done in different working groups rather than for the vision as a whole. In the first arena meeting, the group set out to define one pathway for the whole vision only to realise that this was unsuccessful. In a second attempt, every working group did its own backcasting and translated the vision into medium- and short-term actions. This was very successful, considering that a great variety of measures has been implemented already. In Wolfhagen, the same strategy led to the formulation of one specific activity, the opening of a community centre in the inner city. In Carnisse, the approach was different. The vision consisted of six different images that were used as starting points for the backcasting. For each of the images, pathways were developed, and they were broken down into more achievable but still rather abstract steps. These steps were not sufficient in giving an action

---

<sup>3</sup> an open, chaired group discussion with a variable number of participants, ideally between 8 and 20 (for more information see the appendix of Wittmayer et al. 2011)

perspective, i.e., participants could not immediately translate them into activities. Here, a second meeting would have been advisable.

In terms of **adaptation**, we can say that every pilot did the backcasting in a different way. Rather than being able to conclude that one is more successful than the other, we would like to hint toward two issues. One is the issue of framing, e.g., if the whole process is set out to boil down to one experiment in the end (as in Wolfhagen), then the backcasting needs to be framed in that very way. The second issue relates to the number of meetings necessary for the backcasting. If the frame is broader, including working out different pathways and proposing a number of measures, then one session is not enough to come up with concrete, implementable measures.

#### **Phase 4: Experimenting & Implementing**

In this phase, the short-term actions for realising the vision are initiated. Again, this phase was accomplished in a very contextually dependent way in all three pilots. Whereas in Wolfhagen the group focused on implementing the idea of a community centre, which was delayed due to a number of reasons beyond their control, in Finkenstein numerous working groups started concrete actions towards realising the common vision. This led to new participants joining the initial group and a broadening of the network. In Carnisse, an experiment was started up simultaneously with the deliberative process of problem description and vision building. Starting experimentation in parallel was very helpful for the process in Carnisse, as it allowed shifting between different levels of abstraction: from the experiment (i.e., the preservation of the community centre) to what it meant for the neighbourhood (i.e., being a symbol for the state of the neighbourhood) and back to what a neighbourhood-level vision meant for the future of the community centre (i.e., is it still relevant?). Explicit reflection rounds related to the measures, activities, and experiments and helped the participants stay attuned to the vision and to the greater goal to which the short-term immediate activities contributed. It also supported creation of an atmosphere of learning.

The focus in this phase is on the relevance of playing into **on-going local dynamics** and locally relevant questions in increasing a sense of urgency and a sense of ownership for the 'problem'. Playing into local dynamics means taking stock of what happens locally and formulating an idea of which actions might address local challenges. In Carnisse, this included the collaborative process design in arena 0, the drastic adaptation of the methodology, and completing phase 4 in parallel with phase 2 and 3. In all three pilot areas, the entry points have been questions of social sustainability rather than of food or energy, as had been envisioned in the InContext project proposal.

#### **Phase 5: Monitoring & Evaluation**

The last phase should be an on-going activity throughout the process so as to foster an atmosphere of reflection and learning. In the implementation, there were several explicit monitoring and evaluation events, e.g., monitoring interviews and evaluation meetings, which led to rich feedback and new insights regarding necessary adaptation, effectiveness of the process, and new local expertise. Finkenstein added an online survey tool before holding the



evaluation meeting in order to have some preliminary data on which to base the evaluation meeting. The results of the online survey were also helpful as they gave quite detailed data with regard to specific topics.

The issue to focus on here is that more explicit monitoring throughout can be a way to explicate differing **expectations** with regard to the process. As recommended in earlier deliverables, 'draft progress markers' could be formulated at the beginning of the process and revisited throughout in order to handle the expectations of participants and facilitators with care. Through the formulation of what constitutes 'progress markers', expectations can be made coherent within the community arena so that all are working with a shared goal (since this goal remained unclear sometimes for participants).

### 3.3 Closing remarks

In general the methodology proved to be flexible and open enough to account for the specific contexts of three different settings (i.e., urban/rural setting, Dutch/German/Austrian setting). At the same time, policy stakeholders experienced it as being distinct from other approaches fostering local sustainability (i.e., regional management tools, Local Agenda 21 processes), which was a vital point in gaining support for an essentially open process without pre-defined outcomes.

The pilot projects in both Finkenstein and Wolfhagen conducted the process following the five phases consecutively. This allowed for a broader vision before ranking concrete ideas for implementation. At the same time, local dynamics, such as concrete ideas for experimentation or a wish for quick implementation, and action by participants might require an approach where the phases are implemented in parallel. This was the case in Carnisse, where the process started with a concrete experiment, the development of which was put into the broader context of a long-term vision for the neighbourhood. This mirrors findings from earlier action research in the long-term care sector in the Netherlands (Van den Bosch 2010, appendix of Wittmayer et al. 2011), where experiments also have been started in parallel with the more deliberative meetings.



## 4 Inner Context

### 4.1 Aim and background

This section is a synthesis of the pilot studies with regard to the inner context. It includes a theoretical foundation of four core concepts, namely “Needs and Capabilities”, “Empowerment”, “Social Learning” and “Social capital” in section 4.2, and a comparative analysis of the three pilot studies in sections 4.3 and 4.4.

Linking the data and results from the pilot studies back to the theory (Schäpke and Rauschmayer 2011) is a challenging task. Due to the project structure, the methodology for the community arena (Wittmayer et al. 2011) was developed in parallel to the theoretical framework. Combined with an action research approach rather than one that would allow for testing a hypothesis, a process was developed that was open to meaningful concepts for referring to the inner context emerging in the course of implementation. Our approach in this chapter is to provide feedback on our findings regarding theory building.

The analysis was done by discussing how far the community arena methodology can be used to foster social learning as well as increase social capital and empowerment of local actors. The aim of the process was to address societal challenges and raise awareness on sustainability related topics – concepts which are meaningful in both the theoretical frame (Schäpke and Rauschmayer 2011, 2012) and the action research (Wittmayer et al. 2011). The community arena process used in the pilot projects offers the possibility to empower participants, foster social learning, and increase social capital. Through the arena process, participants are empowered to actively change with their inner and outer contexts, and they gain new insights into their skills and abilities. As formulated in D4.1, the methodological guidelines are: *“Change toward more sustainable strategies is expected as people become aware and learn more about the needs of others and as they are invited to think about the future of their neighbourhood or town.”* (Wittmayer et al. 2011: 22)

We will address the described interrelations by starting with a definition of the core concepts in relation to the inner context (needs and capabilities, empowerment, social learning, and social capital). In the second step, we will analyse the impacts of the community arenas regarding the core concepts.

### 4.2 Defining core concepts

This section provides a brief overview of the relevant analytical core concepts: “Needs and Capabilities”, “Empowerment”, “Social Learning” and “Social capital”. Although we introduce all four of them here, the next section 4.3 focuses on the latter three as these proved to be more meaningful in interpreting the results from the action research than needs and capabilities. This shift in the choice of core concepts will be critically reflected at the end of the current section.

## Needs and capabilities

The most important introduction to the concept of needs was given by the Brundtland Commission in its well-known definition of sustainable development (SD) (WCED1987). The Brundtland Report does not define needs precisely. Different understandings of the term prevail and there are a number of related concepts, e.g., basic needs or basic human needs. The understanding of needs used in InContext draws on the work of Manfred Max-Neef (1991). In his concept, needs refer to the most fundamental dimensions of human flourishing and basic motivational factors shared by all humans. Needs are those reasons for action that require no further explanation or justification; a heightened awareness of needs being met is accompanied by pleasant emotions. Max-Neef (1991) differentiates between the following ten abstract needs: subsistence, protection, affection, understanding, participation, idleness, creation, identity, freedom, and transcendence (Schäpke and Rauschmayer 2011, Rauschmayer et al 2011). In the tradition of humanistic psychology, Max-Neef includes non-materialistic needs as part of human flourishing, in contrast to basic needs approaches.

Amartya Sen and Martha Nussbaum have developed (slightly different versions of) the capability approach (Sen 1985, Nussbaum 2000). The capability approach is discussed in philosophical and socio-economic terms and is mostly applied to issues of human development. Capabilities, its central term, are defined as valuable options from which a person is free to choose his or her actual behaviour (Leßmann 2011: 43). What is valuable to a person depends on how much it contributes to individual well-being, e.g., in terms of personal or family standard of living, and to the well-being of others. Capabilities, i.e., effectively freedom, are constituted by the interaction of so-called conversion factors (personal abilities, such as skills, knowledge, motivations, as well as social and environmental conversion factors) and resources. Nussbaum has, in a worldwide discourse, defined a list of basic capabilities that are essential for every good human life. This list can be used to define concrete government duties (Nussbaum 2011). The capability approach may also be enriched with results from psychological research to better understand behaviour (Schäpke and Rauschmayer 2011). This combination may offer a concept that allows for: (1) explaining behaviour, e.g., of arena participants, and (2) assessing the effects of the arena on the participants' well-being (ibid).

The capability approach puts an emphasis on the freedom of persons to choose which capabilities are valuable to them. Nevertheless, the concept of needs, as understood by Max-Neef, and capabilities as used here can be linked: needs can be used to fundamentally structure the multidimensional set of capabilities. In this way, Nussbaum's list of basic capabilities can be compared to the list of needs that Max-Neef uses (Alkire 2002). Successfully realising capabilities should imply the fulfilment of needs, such as subsistence or affection, and it should be gratifying, induce well-being, and increase quality of life (Schäpke and Rauschmayer 2011). Connecting the concepts of capabilities, quality of life, and needs finally delivers a direct terminological link to the Brundtland definition of SD (Rauschmayer et al. 2011).

## Empowerment

The concept of empowerment is addressed by different disciplines, such as management studies, critical theory, etc., in quite diverging ways. For the evaluation of the pilot studies, we

found Avelino's definition (Avelino 2011, based on Thomas/Velthouse 1990) very helpful as it relates empowerment to transition theory. In this cognitive model, empowerment is seen as an increased intrinsic motivation strongly dependent on positive task assessments. The assumption is that the experience of positively fulfilled tasks leads to a person to believe that his or her personal actions can be directed toward a desired end. The concept is based on the following four intrinsic task assessments (cf. Avelino 2011: 64):

- choice ("make choices"): refers to the degree of self-determination and is also termed as locus of causality (perceiving oneself as the cause of one's behaviour)
- impact ("make a difference"): refers to the degree to which people perceive their behaviour as producing intended effects
- meaningfulness ("address what they care about"): refers to the value of the goal of the task in relation to the individual's own values
- competence ("to be competent"): refers to the degree to which a person can perform task activities skilfully when he or she tries and it is based on the concept of perceived self-efficacy.

These four task assessments in turn depend on the interpretative styles of individuals: *"how they attribute causal relations related to their actions, how they evaluate them based on certain standards of success and failure and how they envision the future in terms of visualizing or anticipating what could happen"* (Avelino 2011: 385). Basically, this means that the way individuals evaluate their actions, attribute them to others, and think about future actions influences the feeling of being empowered.

Of course empowerment also has a highly valuable extrinsic dimension focusing on resources drawn from the project's outer context, such as funding, networks, or facilitations. Nonetheless, we focus on the intrinsic dimension of empowerment as this is central to changes in the inner context of the participants, and topics related to extrinsic empowerment are dealt with in section 1 and 3 ("outer context" and "project context").

Pick and Sirkin (2010) also focus on intrinsic empowerment from a psychological perspective. Whereas Pick and Sirkin's work is meant as a psychology-based operationalisation of the capability approach, Avelino's work is more interlinked with the concept of social learning. Schöpke and Rauschmayer (2011, 2012) interpret empowerment as enhancement of capability-sets, i.e., as increasing a person's possible choices for living a valuable life.

## **Social Learning**

In transition management, social learning is seen as a process through which to deal with complexity and uncertainty. Although learning may be understood in different ways, at its core it involves a lasting change in the interpretive frames (belief systems, cognitive frameworks, etc.) of an actor. These frames comprise interlocking empirical and normative values and beliefs which guide action, including its communicative and expressive dimensions (Grin and Loeber 2007; Grin et al. 2010). The kind of social learning most relevant for InContext can be defined as second order learning. It indicates learning processes aiming at changes in underlying values and assumptions which contribute to the

actual behaviour. Several authors have emphasised the relevance of this type of learning as a way to adapt to a continuously changing and increasingly complex environment through collaborative action and dialogue (Isaacs 1993; Schein 1993; Kofman and Senge 1993; Garmendia and Stagl 2010). Contrarily, in first order learning, fundamental assumptions, values and identities do not change (Argyris and Schön 1978; 1996). This is the simplest mode of learning and has to do with the acquisition of new cognitive knowledge. It refers to changes in strategies of action or assumptions underlying strategies in ways that leave the values of theory of action unchanged. While first order learning takes place within the cognitive space of earlier acquired basic convictions, second order learning takes actors beyond these convictions, as is obviously often crucial in transitions. We assume that second order learning is one possible precondition for voluntary intrinsic behavioural change. The most important conditions for second order learning work are a) surprises, b) outside views, and c) safe spaces (Grin and Van de Graaf 1996; Grin and Loeber 2007). We use the concept of social learning as bridging the level of the individual and the level of the collective, as second order learning is never a purely individual experience but instead always happens in a social setting (Wittmayer et al. 2011).

Schäpke and Rauschmayer (2012) put forth that (social) learning can be understood as one major source of empowerment. On the one hand, learning may contribute to empowerment since participants acquire new skills (first order learning) and thereby enhance their capability set. On the other hand (social) learning, e.g., via self-reflection, may include changes of underlying assumptions and values (second order learning) and allow participants to discover new possibilities to meet needs (Schäpke and Rauschmayer 2011).

## **Social capital**

Social capital describes relationships, relations of trust, reciprocity, and exchange; the evolution of common rules; and the role of networks. It encompasses the involvement of civil society and collective action. Social capital theory provides an explanation for how individuals use their relationships with other actors in societies for their own and for the collective good. The collective good, or welfare, has both material elements and wider spiritual and social dimensions (Adger 2003). Social capital has become a widely used concept in the past years with differing foci. Lehtonen (2004), for example, focuses on the sources of human interactions. These include characteristics of the living area (e.g., a network created through a transition management process) or attitudes and values. Important dimensions of social capital, according to Gehmacher et al. (2006), are Bonding-Bridging-Linking. *Bonding* describes the relationship between people within a group, whereas *bridging* refers to the relation between different groups and *linking* to their connection to other levels (like the state or the broader public). A community arena has the potential to raise all three: bridging, bonding and linking social capital of a community. With regard to bonding, the arena can be a communicative space between actors with different socio-cultural backgrounds. Bridging follows the bonding process. Relationships are built among the participants in an arena as a result of a process of building trust and opening up within the group. Linking social capital can be created through exchanges between the community arena and local decision makers, politicians, or also the broader public. The community arena process asks the participants to build links between their social groups and others (“bridging” and “bonding”), bring ideas of their vision and its realisation to the public, and

collaborate with others for stronger implementation of their ideas. Transition management processes can enable the development of meaningful relations.

### **Critical reflection: From needs and capabilities to empowerment**

In this section we reflect upon the fact that the concepts of needs and capabilities, which figure prominently in our initial project proposal, were not as prominent in the action research carried out. There are a number of reasons for this, some more operational and others of an ethical nature.

As outlined earlier, the action research could not build on a pre-established theoretical frame with regard to concepts on the 'inner context'. The methodological guidelines (Wittmayer et al. 2011) were mainly built upon a transition and backcasting frame, including a section on social learning as a meaningful concept, as well as a rather unrefined operationalisation of the needs and capabilities concepts. This led to a more exploratory research approach to what constitutes meaningful concepts with regard to the 'inner context' in the context of transition research.

The underlying hypothesis of the InContext project was that once we are aware of our needs, we can distinguish these from our strategies and choose strategies that are more sustainable. This asks for intensive self-reflection and a detailed knowledge about concepts of sustainability. One of the important questions that arose during the research concerned the drawing of boundaries connected to our status as researcher: How far does an action researcher go in challenging individuals and in stimulating reflective processes? The answer to this question is not straightforward.

The question can be approached from an ethical point of view as questioning individual needs in a group process can have a therapeutic character: Did the participants consent to therapeutic work? This also touches upon the issue of informed consent, which is part of every ethical code of conduct. Both ethics as well as informed consent take on another dimension in action research. Here, neither participant nor researcher can completely oversee or control all the consequences their collaborative engagement may entail. From a researcher's point of view, this does not release the researcher from acting responsibly and ethically. Within our group of action researchers, this ethical boundary was discussed and seemed to be different for each one of us. What we as researchers agreed upon is that the depth of self-reflection which could be stimulated needed to carefully respect the boundaries of any individual within the arena groups. Participants are also considered agents in the interaction with the researcher who can make their boundaries clear in a variety of ways. It should be part of a researcher's ability to read these signs or clarify unclear messages. The working attitude we adopted was that while deeply held beliefs and values might be challenged in the process, this should happen in a safe and trusted environment and safeguard individual boundaries (see also Wittmayer et al. 2013a).

Having reflected on this, the community arena, as it was developed by Wittmayer et al. (2011), was framed as a *"co-creation tool for sustainable behaviour by local communities,"* which *"builds upon the insights of transition management and backcasting as well as*

*literature on inner/outer contexts of behaviour and social learning*" (Wittmayer et al. 2011: 5). This shows that the approach was open with regards to what would constitute meaningful concepts in the local contexts of the pilots, while it pointed to needs, capabilities, and social learning.

The processes in the three pilots eventually focused more on the individual within the group than on the individual him or herself. This meant that rather than capabilities, we used empowerment, social learning, and social capital as more fruitful concepts for analysis. In the different pilots, the concept of needs was dealt with in different ways. The use very much depended on the background of the action researcher in question. This points to the importance of transparency on the part of the researcher in these kinds of processes. For all pilots it was clear that the concept of needs would be explored only to a certain extent, for reasons outlined above. For testing a theoretical model, we would have had to choose not only a different kind of research approach (than action research), but also a different sequencing of the complete project in the beginning. Nevertheless, particularly the concepts of empowerment and, to a lesser extent, social learning, which were used for making sense of the inner context of participants in the concrete action research, can meaningfully be connected to the concepts of needs and capabilities.

### 4.3 Analysis of core concepts

This section investigates how much the community arena process empowered participants, created learning experiences, and connected participants within their own social groups and to other groups. This section is mainly based on data from evaluation interviews, the participatory evaluation session, and participant observation. It reports on the perceptions of the participants in the three pilot areas.

#### **Making a difference: from wish to reality**

Analysis of the empirical material, from the perspective of empowerment (defined as increased intrinsic motivation), shows that the community arena had positive effects on all four intrinsic task assessments. Having analysed the material, we can argue that the participants self-reported that the community arena contributed to an ongoing learning and empowerment process in the pilot areas.

Regarding the task assessment "choice", the fact that the process had an open agenda contributed greatly to the participants' feeling of self-determined behaviour. It gave people the feeling of being able to choose what to put on the agenda and that no certain policy agenda was "imposed" on them (which they feel is often the case). For participants of the pilot project of Carnisse, this also positively distinguished this project from other processes carried out in the neighbourhood in recent years.

In terms of the category "impact", the wish to make a difference in the local environment can be traced back to the reported motivations for joining the project. While in Carnisse motivations for joining were to gain a better picture of the whole context in which they were



living and working and for some more precisely keeping the community centre open, in Finkenstein people were generally interested in co-creating their environment in order to increase quality of life. This engagement was described by some participants even as part of their responsibility as a citizen. Asking participants from Finkenstein in the evaluation phase if they believe they can have an impact on the local environment, most of them responded in a positive way, although there is also some scepticism. The scepticism mainly resulted from high expectations of the participants in terms of the process, involving big parts of the public and leading to too many measurable outcomes. This was addressed through the learning process, emphasising that transitions occur in small steps and need time. The wish to have an impact on the community in Finkenstein also led to an increased interest in local politics – some of the arena members organised themselves to participate as a group at a meeting of the local council (*“we want to know how this works”*). Additionally, two participants decided to be candidates for the local council. In Wolfhagen, the participants were slightly different than in the other two pilots because all of them had already gained positive experiences in different community-based processes. This means they were convinced or had personal experiences showing that their actions are fruitful.

The third intrinsic task assessment leading to empowerment is ‘meaningfulness’ – it concerns the value of the goal of the project and is based on the assumption that if a project’s goal links to the ideals of the individual participants, this has an empowering effect. The scores participants gave for being able to bring in their own input and topics they felt strongly about were good in all pilots. This positive assessment is also clearly related to the open agenda of the process as this made it possible to specifically address the important topics and meet the different senses of urgency (e.g., tackling the turbulent times in Carnisse and Rotterdam and working on social cohesion in Finkenstein and Wolfhagen, amongst others).

The task assessment for ‘competence’ was closely linked to the second one on ‘impact’. The results are closely linked to those we report in the next section about ‘social learning’. In summary, participants felt they can have an impact on their community, although some were also sceptical and claimed that more time, people, money, and political support would be needed. In terms of social learning, people gained competence in a series of different skills (e.g., speaking in front of many people, working together) and also changed some underlying values and assumptions (i.e., related to people with different backgrounds). All of this strengthens the perceived competence and therefore has an empowering effect.

Changes in the interpretative styles of the individuals are also very important, especially in the way participants evaluate their actions and envision further ones. The distinct and long envisioning phase of the community arena clearly provided excellent training for envisioning further actions and making possibilities visible. In terms of evaluating success and failure, the urge to produce concrete, short-term, quantifiable results was present in Finkenstein and Carnisse. In Finkenstein, some participants reported changes regarding this interpretative style as they also started to recognise the process itself and other invisible aspects (e.g., social capital, social competences) as “success”.

In sum, the community arenas addressed all four task assessments – choice, impact, meaningfulness, and competence. Through social learning processes, the participants’ belief that they are able to direct their actions to desired ends could be strengthened; thus, empowerment took place.

## Learning to change values and assumptions

In the evaluation interviews as well as in the participatory evaluation meeting, participants of all pilot projects reported several learning experiences, including first as well as second order learning. In Carnisse as well as in Finkenstein, people reported that they learned about their possible impact (see above) and their roles and the roles of others in the project. This increased awareness led many participants of the community arena in Finkenstein to change their attitude towards the future. They reported that they can encounter future developments in a more relaxed way and focus more on the present after experiencing that can actively influence developments. A very important learning experience shared by all pilot project participants was the experience of working together in a respectful and constructive way even with previously unknown people and in a very diverse group. In Finkenstein, people reported an increased self-reflexivity and attention through contact with other people. Some participants described themselves as being more open and having fewer prejudices in interactions with others. In Wolfhagen, the participants experienced that it is very fruitful to discuss in a diverse group, sharing information and different perspectives. All learning experiences mentioned so far can be defined as second order learning processes. They all touch upon underlying values and assumptions – about the roles of different actors in shaping the local environment, ways of collaborating with different people, and subsequently attitudes towards the future. As mentioned above, second order learning processes of this kind are crucial for transition processes as they open windows for behavioural changes and help deal with increasing uncertainty and complexity.

These second order learning processes are complemented by more first order learning processes, which centre on concrete skills. Examples for these are: speaking one's mind in public and in front of a large group of people (e.g., 100 people); facilitating meetings (participants in Finkenstein even facilitated a sociocratic election by themselves); working respectfully together in diverse (e.g., intergenerational) groups; and the whole array of legal, financial, and institutional know-how related to keeping open a community centre (for Wolfhagen and Carnisse).

As also mentioned above, stimulating factors for second order learning are a) surprises, b) outside views, and c) safe spaces. For all community arenas, the integration of outside views seemed to trigger second learning in a special way. Participants in Wolfhagen reported that the exchange and discussions in a diverse group created a fruitful atmosphere for collaboration. This also holds true for Carnisse and Finkenstein. Participants of the latter described the continuing contact and exchange with the transition team (consisting of local decision makers) as an interesting learning experience. This exchange increased the value of the work of politicians in the eyes of the participants. In establishing the community arena, all research teams were very attentive to building trust among the participants and especially between the participants, the research team, and local policy makers. These trust-building processes were successful in all pilots and guaranteed a safe space for fostering second order learning. Participants from Finkenstein also explicitly reported some surprises ('eureka moments') they came across during the project, e.g., the insight that some apparently individual worries (but also ideas) are shared by others or that social cohesion is not very strong among the long-established population in Finkenstein.



## From single individuals to connected groups

The community arenas enriched the social capital of the participants in all pilots as new relationships and networks could be established. A participant from Finkenstein described the networks, offering a platform for discussing ideas and worries about the shared living space, as being particularly strong: *“Through the process the group got stronger than the sum of its single members.”* Via relationships and networks, new ways of working together for the collective as well as the individual good could be found and tested. Two aspects form the bottom line for these attempts to shape the local environment: a trusted atmosphere in the community arena as well as the insight that there is a shared understanding.

In terms of bridging, bonding, and linking, the difficulty arises that people are simultaneously part of different groups; therefore, a net distinction between these three types of social capital does not seem possible. However, we could observe bridging, bonding, and linking between the participants of the arena as well as the wider public involved in the projects.

In composing the arena, all research teams specifically tried to mix people with different socio-cultural backgrounds (bridging). Although it was difficult to achieve an ethnically mixed group in Carnisse as well as in Finkenstein (see section 4), groups were quite diverse in terms of age, gender, professions, etc. This diversity was appreciated by the participants themselves as it gave them the possibility to gain new perspectives and unconventional insights, a very important condition for social learning.

Participants of the community arenas also connected with other groups (linking). In Finkenstein, these were primarily policy makers (as part of the transition team) and the general public. In Carnisse, contact with other groups actively engaged in the neighbourhood and also the local government was established through an outreach event. In Wolfhagen, the group got in contact with the owner of the vacant building they identified as a possibility for the community centre. From this point of view, social capital in terms of bridging and linking between groups could be established, and people with different backgrounds, who probably would not have met without the community arena, created networks.

From another point of view, bonding relationships could be established as well. People of all arenas reported appreciation of the exchange and collaboration with “like-minded” people and perceived themselves as “one group”. For this perception, the vision-building process was probably decisive as it contributed a lot to a group feeling, giving the group a shared aim. The notion of being “like-minded” also often refers to having a common goal – a collaboratively created vision.

In sum, social capital could be enhanced for the participants and thereby also the social capital of the communities.

## 4.4 Closing remarks

Working with the instrument of the community arena brought changes in the inner context of the participating individuals: through social learning processes, changes in underlying values and assumptions occurred. People feel, for example, more able to direct their actions towards desired ends and to have an impact on their local environment – thus, empowerment took place. Also, not really visible but of great importance are the variety of

social contacts and connections (social capital) that were established. Social capital, empowerment, and social learning effects are all crucial to enhance the transformative potential of communities in order to face societal challenges.

Three aspects were especially important in triggering changes in the inner context: The open agenda was very helpful in empowering the participants as it gave them a sense of meaningfulness and choice. The diversity of the groups was decisive for successful social learning and (bridging) social capital. Finally, the intense trust-building phase and trusted atmosphere in the small group of the community arenas established an environment conducive to learning.

## 5 Outer context

In this section we compare the three pilots focusing on the following aspects:

- 1) Organization of the community arena and leadership (within community arena group)
- 2) Community arena and the political context,
- 3) Community arena and the wider community

Next to the presentation of the empirical results from our action research in the three pilots, we also compare these results against outcomes in the case study research of InContext (Debourdeau et al 2012) where appropriate. This case study research focussed on analysing *existing* niches and grassroots innovations (rather than those initiated through action research) which had emerged in different European countries (Belgium, France, Austria and Germany). The case studies focus on different issues like local production of renewable energies, organic food production, and veggie days (see figure 1). Analysing niches, which experiment with more sustainable alternative consumption and production practices to reduce negative consequences on the environment, reveals insights about their potential for mainstreaming and diffusion of these ideas or practices (Debourdeau et al. 2011, Smith 2006, 2007, Wiskerke 2003, Kemp et al. 1998).

### 5.1 Organization of the community arena and leadership

The following section describes and analyses how the community arenas were facilitated by the transition teams as well as how they were organized by community actors themselves after the facilitated group meetings. Leadership is closely connected to the organisation of groups, but it can also be interpreted in multiple ways: as a person, role, practice or process. Traditional leadership studies focus on the role of persons which possess certain qualities or attributes (e.g. Bass 1999, Burns 1978). In this traditional sense, our focus is on how the community arena groups organized themselves and were formalized, e.g. through choosing group leaders. With the community arena methodology, which aims to create the conditions to enhance the transformative potential of communities in addressing societal challenges, it follows that also new conceptualizations of leadership are needed. Based on insights of complex adaptive systems theory (as is Transition Management), different kinds of leadership theories were developed (see Uhl-Bien et al. 2007, Lichtenstein & Plowman 2009). Leadership is not seen as a quality of a person but as a process: *“Using the concept of complex adaptive systems (CAS), we propose that leadership should be seen not only as a position and authority but also as an emergent interactive dynamic – a complex interplay from which a collective impetus for action and change emerges when heterogeneous agents interact in networks in ways that produce new patterns of behaviour or new modes of operating”* (Uhl-Bien et al. 2007: 299). In their framework ‘Complexity Leadership Theory’,

Uhl-Bien, et al. (2007) distinguish between three forms of leadership, of which adaptive leadership is one which will appear in the discussion of the results below.

### **During the facilitated group meetings**

In the beginning of the three pilot studies, local frontrunners<sup>4</sup> were invited to take part in facilitated workshops to develop visions of their desired local future and to think about ideas and pathways to get there. This part of the process was facilitated by the researchers (at times with assistance by a second person). The facilitation aimed at creating an open discussion culture within the group by encouraging everyone to speak up and by supporting a respectful and democratic exchange of opinions and ideas (see also section 3.2). In all three communities, this open setting led to a broad array of perspectives that was included in three rich visions. In Wolfhagen for example, the monitoring interviews revealed a high degree of satisfaction regarding the group process and the discussion culture in general. Facilitation can thus be seen as an effective tool in creating democratic social settings, enabling opinions held by a minority to be part of the debate. So, in addition to research skills, an action researcher should have appropriate facilitation skills, as well (Greenwood and Levin 2007, Levin 2012).

### **After the facilitated group meetings**

Looking at how the community arenas organised themselves after the facilitated meetings and what types of leadership occurred, different models emerged in the three community arenas.

In the pilot study in Wolfhagen, no formal leadership has occurred (yet), but some participants reported that there are people in the group which were seen as being key actors because of their contacts and their high level of engagement (like the organisation of group meetings, etc.). Still, the group that aims to open a community centre has not formally chosen a spokesperson. This can be explained by the temporary nature of the group which defines itself as an initial group for starting the activity and aims to involve more people when it comes to the actual implementation.

In Finkenstein, leadership already emerged in phase 4 of the community arena: each working group is led by one person. After the end of the facilitated group meetings participants articulated their need for someone to take over a portion of the research team's tasks (e.g. internal and external communication, organisation of meetings, etc.). Those actively involved in the project elected eight representatives to comprise the 'coordination team' in a so-called 'sociocratic election'. It is noteworthy that the election process was organised and facilitated by participants of the community arena themselves (which in itself is connected to group empowerment). The research team was only consulted on minor issues. At present, this elected coordination team leads the process of realising the vision for

---

<sup>4</sup> See section 5.3 for more elaboration on the notion of 'frontrunner'

Finkenstein 2030 and organizes primarily the interplay of the working groups for the coming two years.

In Carnisse, we can distinguish between the community arena process and the experiment focusing on reopening the community centre. The latter shows clear signs of leadership. In the course of a one year process, a group of three women stood up and established a foundation which is now formally responsible for operating the community centre. However, the community arena itself formally ceased to exist after the facilitated meetings. There were no attempts by the participants to keep this structure alive through regular formal meetings.

We can thus distinguish a number of different development trajectories of such a community arena group:

- a) The community arena group evolves itself into one (or possibly several) working group(s) that focus on a specific experiment, i.e. the opening of the community arena in Wolfhagen;
- b) The community arena group selects a 'coordinating team' from its participants, which organizes the different working groups that have been created to realize the group's vision, i.e. Finkenstein;
- c) The community arena group ceases to exist formally after the facilitated meetings, while the working group on a specific experiment evolves into a formalized structure, i.e. a foundation as in Carnisse.

These trajectories each show a different degree of formalization of leadership: from more latent in Wolfhagen to formalized in Carnisse. What distinguishes the latter structure, the foundation, from the sociocratically elected coordinating team is that to start a foundation also has legal and financial implications. It is also interesting to see the community arena group itself as a leader within its societal context. As such, these three examples are part of a vivid discussion of whether these kinds of interventions should be of a temporary nature or should be formalised and integrated into pre-existing legal structures. There is no clear position in transition management literature (e.g. Loorbach 2010, 2007) on whether a transition arena should become a formalized actor or whether the participants should rather disperse and spread the narrative and its ideas into their networks. And based on our findings it is hard to indicate if/which one is necessarily more preferable over the other.

Leaving behind the idea that leadership needs to reside in individuals or be organized in formal structures, leadership can also reside in processes and their results (like the visions and change narratives that were created in the three communities). This is referred to as 'adaptive leadership' by Uhl-Bien, et al (2007), who define it as leadership that emerges from the interaction of actors and results in ideas, coalitions and movements. A vision resulting from the interaction of actors can thus exhibit adaptive leadership (Diepenmaat et al. 2010). In the context of the three communities, it is too early to say whether and to what extent the visions indicate (forms of) adaptive leadership in the sense of its significance (potential value) and impact (extent of acceptance by others). However, judging from the appeal of the vision in Finkenstein, there are already some results that point in the direction of this adaptive leadership, e.g. the vision attracted additional community members, who were not involved in the initial community arena group, to join the working groups.

In the context of a sustainable transition, where new practices should also emerge, the Finkenstein trajectory is most interesting. Holding a sociocratic election can be seen as experimenting with a new way of making decisions that do not fit the current majority vote system. Through this election, Finkenstein is also pioneering new practices with regard to decision making as well as emphasising different underlying values. This relates to the findings from the case studies, where all investigated niches were characterized by flat hierarchies (Debourdeau et al. 2012). These were identified as being an important motivational aspect for engagement by the group members.

## 5.2 Community arena and the political context

The implementation of more sustainable actions can be influenced by a variety of governmental actions. For example, if we look at the case studies analysed in WP3, the involvement of authorities ranges from active involvement (renewable energy community, Wolfhagen), to financial support (Veggie Days, Ghent), to ignorance (food cooperative, GELA). Whether authorities are interested in supporting sustainable initiatives differs very much depending on the specific field of action. The production of renewable energy is, for example, necessarily closely linked to governmental actions, while initiatives like small scale food cooperatives could, at least to a certain extent, work more autonomously.

Also, in communities where participatory governance is already part of the political culture, local decision makers are generally more sympathetic towards alternative niches and ideas than in communities where top-down decision making is more common. Nevertheless, the WP3 case studies show that innovations might occur with or without governmental support. But they also show that supportive environments could lead to a wider spread of ideas and more active involvement of local citizens (Bauler et al. 2013). The implementation of citizens' pioneering ideas in a community could not only intensify a trustful cooperation between local decision makers and engaged citizens, but it could also strengthen local skills and knowledge-sharing.

So how did the political context in the three pilot projects influence the community arena process? All pilot projects were to some degree supported by governmental actors on local scale, i.e. provision of rooms for the group meetings (Wolfhagen), co-funding from the local municipality (Finkenstein), or funding from national programs through the local municipality (Carnisse). However, the direct involvement of local political actors and decision makers in the community arenas differed significantly in the three pilots.

### **Local governments and their citizens**

In Wolfhagen, the community was accustomed to being involved in participatory processes. This is in part due to the city's goal of meeting its entire communal energy need exclusively with locally generated renewable power by 2015 – a project that should be implemented with significant public involvement. In comparison to other activities in the local context, the arena process was described as being very different with regards to its structure, the heterogeneity of the group members and its specific focus on one concrete implementation project. The participants in the Wolfhagen arena described the relationship between citizens and the local

authorities as trustful and mainly positive. There were hardly any doubts that the administration and local decision makers (especially the mayor) would support the arena process when it came to the implementation phase. In sum, most of the arena group members were surprised that such a short-term intervention could lead to such a concrete project idea – even in a diverse group. Without the trust in the local authority perception, participants, would have been more hesitant to spend part of their limited free time attending the arena meetings.

In Finkenstein, similar to other (particularly rural) areas in Austria, there is currently hardly any participatory governance. The curiosity and interest of the community in such a process was immediately clear during the well-attended public launch event, where the research team outlined the process and goal. This also means that the participatory approach was a new experience for the community arena participants. Also, during the process interest by local policymakers and politicians was so high that the methodology was adapted and a 'broader transition team' was founded (see below). In this team, they could be given a role in the process. During the arena process, some people from within the municipal government and administration, started to act as important contact persons for citizens in Finkenstein. Overall, the relationship between local government actors and the community arena was perceived as a positive one. Also, government actors were supportive in the implementation phase. However, there was scepticism in the beginning by the conservative and rather right-wing parties (three of them exist in Finkenstein). The co-funding had to be approved by the city council and it did not pass by a particularly large margin (51%). Conservative and right-wing party members remained critical throughout the process, with only a single exception.

In Carnisse, the community and policy makers are rather tired of participatory processes. These processes are mainly initiated by the municipality and are meant to inform rather than to consult or to involve the public. Previous participation processes were often seen as being unsuccessful or were at least judged critically by residents. Recent municipal budget cuts increased these sentiments. Therefore, the pilot process was eyed with suspicion because both local policy makers and inhabitants of Carnisse were sceptical of whether the arena process could deliver the concrete results they were seeking. In this context, the community arena methodology was perceived as unique by the participants: a process with an open agenda that was to be set by the participants and was not initiated by the municipality. The local municipality on the other hand perceived the fact that the arena process was something which could not be controlled in terms of output and outcome as problematic. Overall, because of the weariness of previous participatory trajectories and other projects, there was a low level of trust between the different parties involved. The participants could not all adapt to this new form of participation and at times fell into the roles which they were accustomed to from previous municipality-led participatory processes, (e.g. pointing at others for the blame or to take action).

### **Transition Team dynamics**

In Finkenstein, most of the transition team members were also members of the municipal council, or were rather close to it, and therefore directly involved in the shaping of the community arena process. In Wolfhagen there was a more general support by the mayor and the administration but no direct involvement in the process. In Carnisse, the relationship between the transition team and local decision makers ranged from disinterest to rejection

because of the interplay between transition activities and political decisions. Also, the case of Carnisse shows that the relationships between governmental actors and the transition team are dynamic and can change over time. Reservation and scepticism in the beginning, turned into support in Carnisse, but could have also turned out the other way around. This very much depends on the specific pilot's targets and its linkages to current policies, but it is also strongly influenced by the specific local political culture and current local challenges (e.g. shrinking budgets).

### **Legal issues**

Additionally, legal developments can play an important role for the emergence of niches by creating or closing windows of opportunity. Primarily in the more action-oriented phase of implementation, the focus of the process shifts to what the local government can do, such as funding, legislation, etc. Legislation, for example, plays a crucial role by enabling and facilitating the production of renewable energy at a reasonable price (esp. the Renewable Energy Act), which is crucial for the energy transition in Wolfhagen. Additionally, in Carnisse the dynamics between niches and the local government or political actors changed drastically when it came time for tangible action and the possibility of funding through subsidies or other mechanisms. For example, participants involved in the reopening of the community centre were looking to these actors for financial support, but instead they were kept at a distance and both policy and political actors were sending contradictory responses. This led to an increased indecisiveness on the part of all involved. The lack of transparency and the lack of trust mentioned earlier resulted in a lengthy implementation process with mutual conflict and frustrations, in spite of the best intentions of all the actors involved.

Overall, both the results from the case studies and the pilot projects show some notable similarities. Based on the findings, the less local governments or political actors are involved, the more independent the community arena can operate. This means that the outcomes of the arena (e.g. the vision, the local agenda or the experiments) are less influenced by policy agendas. This however can be perceived as both positive and negative. Less policy or political interference, also implies more pressure on local communities to deliver results or undertake actions themselves. On the other hand, it also contributes to a larger feeling of ownership and empowerment. But what are the consequences of a more intense and positive relationship with policy or political actors? The case of Finkenstein shows, that this can lead to more support and decisiveness in the implementation phase, which relieves the community arena participants of their (time and/or financial) investments and responsibilities. All in all, the involvement of policy and political influence in a community process is a balancing act for both the local government and arena participants. The choice to go for more or less involvement depends strongly on the described context and historical relationships and projects, as well as the motivations and aims of the participating frontrunners and community actors.



## 5.3 Community arena and the wider community

This section focuses on the relationship between the community arena and the wider community. It does so by analysing the group composition of the arena and discussing the formation of new networks as an outcome of the action research.

### **Group composition and the notion of ‘frontrunner’**

Part of the community arena methodology was the selection of participants for the community arena groups. As emphasized by Brugge and van Raak (2007), arena group composition is an important variable and should be carefully prepared. These authors highlight the importance of group diversity, which corresponds with the community arena methodology, where a diversity of perspectives is emphasized with regard to the community members who are “*identified and selected based on their competencies, interests and backgrounds*” (Wittmayer et al 2011: 11). These competencies include the ability to look beyond the limits of their own discipline and background, or enjoying a certain level of authority within various networks, among others. Selection in a transition management process is based on knowledge and competencies rather than on a certain position of power or authority (see also Brugge and van Raak 2007). As outlined already in section 3.2, this notion of frontrunner, originally used in sectoral transitions in a professional context, needs to be adapted in order to be used in a community context.

The researchers started with a system and actor analyses examining, among other things, the composition of the population, past community experiences with participation, as well as local tensions and dynamics. In the following, we describe and analyse the group composition and the operationalization of the notion of frontrunner for each of the communities.

In all three pilots, demographic criteria were considered important for selecting participants (e.g. age, gender, location). In Carnisse, frontrunners were identified as those individuals who were passionate about the neighbourhood and were active in it (rather than using the criterion of simply living in the neighbourhood), with new ideas and creative actions. These criteria were also used in Wolfhagen. Next to demographic criteria, it was important that the group as such should be diverse in terms of background (inhabitants, artists, local entrepreneurs, public officials, etc.). In the case of each of the pilots, participants did not previously know each other, or had only heard of each other but never met in person. In none of the pilots did the researchers name the participants ‘frontrunners’, as the methodological guidelines suggested, so as to not put them under pressure. In Finkenstein the focus was on making an effort to identify and select engaged citizens for the Community Arena, who reflected the diversity of Finkenstein, while not being representatives of the predominant political or institutional system. Important for the identification in Wolfhagen was their ability to work as multipliers for sustainability ideas and not to be ‘participation professionals’ but people, who are engaged in different societal fields (e.g. member of a support group of a local school) and who have their centre of life in the city.

What remained challenging in both Finkenstein and Wolfhagen was the inclusion of people from low-income groups, people without some form of additional education (less so in Finkenstein) and/or people with a migrant background. In Carnisse, it was possible to get

people involved with less formal education and/or low incomes, but it proved to be challenging to include people from a variety of ethnical groups. The arena group, consisting predominantly of so-called 'white Dutch natives', had indicated throughout the process that they miss diversity and the perspectives of others that also live in the neighbourhood, e.g. people with Turkish, Antillean or Moroccan roots (almost 60% of the inhabitants of Carnisse are of 'non-Dutch descent'). Their voice was partly brought in through the initial interview round, but none wanted to take part in the arena group itself (although some joined an incidental session). The integration of participants younger than 25 - 30 years was also challenging across the three pilots. Though, overall the transition intervention was successful in creating a new communicative space and also new diffusion and translation paths for ideas.

From these empirical descriptions, we can distil characteristics of frontrunners who were invited to the three processes. A frontrunner in a community is a person who is passionate about and active in his/her community on one of a variety of issues (e.g. social, economic or environmental issues) or fields (e.g. sports, schools, socially marginalised groups). They are multipliers, but are not part of the community's dominant (participatory or institutional) system. We propose, focusing on the group composition as a whole, rather than just on the individual. The group members should not know each other beforehand, come from a diversity of backgrounds and the selection should take demographic information (such as age, gender, ethnicity and geographical balance) into account. What is important from a transition management perspective is that the group members have a particular perspective on their community, its challenges and its future that would otherwise not be brought into the discussion. From a social justice perspective it is important to balance interests, power and politics as to aim for more equal involvement, i.e. putting sustainability into the process design. In line with Jhagroe & van Steenberg (forthcoming) we suggest that in a community context, rather than focusing on frontrunners as persons, we can think about seeing frontrunning as a verb and as an activity that can be adopted by different people in different contexts. This opens up a more emancipatory notion (i.e. everybody is able to 'run in front' at their own pace and in their own context and field of interest) instead of one that is more elitist. We suggest that this would be a more just implementation of the principle of selective participation.

## **Networks**

The implementation of the community arena methodology led to new local networks with unique compositions in all three communities. In both Finkenstein and Wolfhagen, the formation of these new networks was identified as being very important by the participants themselves. However, when we look at the researched 'niches' in the case studies from WP3, (Debourdeau et al. 2012) we can discern some major differences: with regards to the network structure, the pilot project communities show a broader variety of actors and a structured process design (which included moderated workshops and facilitation techniques like vision building and backcasting).

Current results from the three pilot studies indicate that the networks resulting from the community arena process will continue activities after the end of the InContext project - even

if this will not necessarily be as one group. In all pilot areas new 'action oriented networks' have been created which show promising potential for broader networking activities and an intensified exchange of ideas towards sustainable developments, i.e. the realization of the visions that the communities drew up. Where the participants had close contacts to diverse networks, such as e.g. in Wolfhagen, where they were active members of NGOs or CBOs, these action-oriented networks facilitated the circulation of ideas.

It remains interesting to investigate the potential longer-term effects of the community arena process on the development of network structures. Follow up research focussing on the long-term effects could yield more insights into the diffusion of ideas and identified pathways towards more sustainable societal transformation, especially with regard to the impacts of networking. In general, experiencing collective actions as being fruitful could motivate further engagement in groups and therefore could also support societal transformation towards more participatory governance (e.g. WBGU, 2011; Simon and Bell, 2013, Loorbach, 2007).

## 5.4 Closing Remarks

In this section we return to our earlier goal of comparing the analysis of the case study results of InContext (Bauler et al. 2013) with the results from the action research in the three pilots. Comparing these two, it is quite obvious that there is no 'one size fits all approach' with regard to explaining the emergence of niches or the implementation of arenas for sustainable actions. Though some general conclusions about conditions and framings could be drawn based on the work of Bauler et al. (2013):

- a) emerging niches can be explained by the interplay between multiple framework conditions and actor's personal attributes;
- b) spaces of opportunity have to be identified by core actors;
- c) the growth conditions for niches depend upon specific variables – some niches need direct support (e.g. from decision makers) others are able to work quite independently;
- d) skills and knowledge within the groups are important to enable alternative practices.

These general conclusions also hold for the pilots, but only if they are modified to the pilot contexts which in its turn enriches these previous conclusions. Linking the case studies to the pilots brings us to the following insights:

- a) The interplay between framework conditions and the participant's willingness to act is independent of whether the niche is self-organized or initiated by a transition management process. In both cases, at least some framework conditions are necessary to start the process, like a general concern regarding sustainability issues and the willingness to take part in a process or initiative.
- b) Regarding the spaces of opportunity, the pilots were implemented from external intervention but the concrete design and definition of aims were still created by the participants themselves. For example, in Carnisse the arena focused on the reopening of a community center which had recently been closed by the community because of budget cuts. However these windows of opportunity could also be fragile, as the pilot in Wolfhagen showed. In the middle of a fruitful negotiation between the

arena group and the owner of the building which was planned to be the place for a new community meeting space, the owner died by an accident which interrupted the process.

- c) Concerning the growth conditions, the three pilots differed from the beginning with regard to their financial funding (Carnisse and Finkenstein were additionally co-funded by governments). Additionally, the networks will have different needs for support or autonomy related to their different aims. The political context, the local dynamics and relationships and the characteristics of the participants play a crucial role in the question of whether the community groups need support or can work more independently.
- d) Skills and knowledge were partially brought into the process by the research team which used backcasting and moderation approaches to facilitate the process. Transition management primarily addresses frontrunners, which in sectoral processes comprises those with knowledge and certain competencies. This does not completely hold for community processes, but all arena groups had at least some participants who were experienced with working in groups.

The comparison between niches and pilots show that there are a number of similarities between groups that emerged and those that have been implemented by external intervention. However, future research is needed to reveal the pilots' long-term effects.

## 6 Synthesis

In this synthesis we return to our introductory question: To what extent did the community arena contribute to enhancing the transformative potential of the three communities.

Turning to literature on innovation in the social domain, we propose to conceptualize the transformative potential of communities as the degree to which a community is able to be a cradle for social innovation. Social innovation “*is about the satisfaction of basic needs and changes in social relations within empowering social processes*” (Mouleart 2010:10). Slightly adapting this definition, we define the transformative potential of communities as the degree to which a community can satisfy the needs of its members (in the sense of Max-Neef, these are subsistence, affection and love, understanding, participation, creation, leisure, protection, identity, freedom and transcendence) and can change social relations through these “*empowering social processes*”, where the community arena can be seen as one such process. In the specific context of sustainability transitions, enhancing the transformative potential of a community to address societal challenges means increasing the extent to which a community can satisfy the needs of its members and is able to change social relations by making use of empowering processes.

The community arena provides an open, diverse and emancipatory setting and is intended to support empowerment, the satisfaction of needs and the change of social relations through the following points.

### **1. Creating networks for people that feel the urge for change**

Through being relative outsiders to the power struggles within the community, the action researchers could provide an analysis as a starting point that was more objective in the sense of it not being imbued by vested interests. Through this analysis, people with the urge for change within the communities were identified and invited representing a number of demographic groups and on the basis of their different perspectives. Being a relative outsider involved a longer starting phase where a common language is developed, expectations are discussed and trust is established. This creates a network of change-minded people within the community that provides a safe haven for them if confronted with resistance from vested interests or dominant institutions. Through working together and realizing their own possible impact they also become more independent from these local institutions. The communities valued the support of an outsider in revealing their transformative potential; it was considered to be fruitful for the process.

### **2. Encouraging all involved to reflect on their values, beliefs and assumptions.**

The process explicitly involves the reflection on participants' own values and beliefs, as these are put on the table when discussing the current situation of the community and the imagined future. In these discussions, all involved (including the researchers) benefit from the broad range of perspectives (including the underlying values and beliefs) that are present. Through

engaging with these perspective in group discussions, all involved can learn. Thinking about the future of the community implies thinking about your own and your children's future and how this goes together with how others see the future. This reflection applies not only to the community members but also includes the researchers, especially when it concerns the value of 'sustainability' and how it is to be framed in the research. This makes the community arena methodology part of a sustainability science that is not side-lining values, but putting them forth as subject of inquiry – not only for the scientific practice but as a practice of all involved (Miller et al. 2013).

### **3. Opening up heads and hearts**

Envisioning a common desired future and collectively formulating visionary images and pathways leads to a sense of shared direction. Being able to imagine a desired future and create a narrative of it brings this future closer and makes it more tangible. However, avision is more than a narrative and can come with images and emotions, these are just as important to consider. Playing into and appreciating local dynamics could mean to not start with the term sustainability but to start with local issues that people feel are important and then make the connection to the long-term, far-away places, other (groups of) people, our planetary boundaries and just societies. Starting with what matters most locally can open up a much broader discussion. The process of envisioning is part of this discussion and raises understanding and appreciation for other perspectives, while simultaneously creating a feeling of the group being 'in this together'.

### **4. Fostering the interaction of inner and outer context**

Enhancing transformative potential is dependent on the delicate interaction between inner context (individual and collective) and outer context conditions. The community arena methodology provides space for the interaction of both contexts in a safe setting. It seemed that these are often two sides of the same coin, for example increased social capital from an inner context perspective and emerging networks from an outer context perspective are both key variables which support the transition processes. While social capital centres more on the social contacts of an individual, networks describe the way different groups are connected with each other. Another example is the organisation in a small group setting which involves questions of leadership on a group level: accepting it does include having a sense of impact, and hints to psychological empowerment. Both contexts shape the capacity of co-creating the own environment, as well as its enactment.

These are just a few examples for the interplay of inner and outer context which is needed in order to enhance transformative potential. The instrument of the community arena ended up being a space that is small and trustful enough to address the inner context, and at the same time significant enough to address the outer context. In this way the community arena facilitates the interaction of both spheres.

## **5. Connecting imagination and reality**

Through this approach, the imagined long-term vision is connected to the immediate tangible present. Two ways of forging this connection are the creation of an action perspective and the creation of place/space. The long-term vision is connected to short-term action via the backcasting methodology where a diversity of pathways are drawn up that lead to short-term, action-oriented projects. Through implementing these projects, which in one form or the other address the desired change, all involved learn about how this change can be realized. The latter is what we refer to as an action perspective for all people involved, i.e. using the vision as guidance for drawing up suitable actions. Another way to render the vision more tangible is its connection to the places in which the communities live. As such, the community arena methodology can be seen as a place-making process: it shapes the concrete physical place (e.g. through opening up a community centre) as well as the imaginative space.

In sum, the transformative potential of communities in the light of societal challenges can be enhanced through empowering processes such as the community arena methodology. Change-minded people are coming together in an open and diverse setting and by thinking about the future they not only reflect on their own perspectives and values but are also confronted with others' perspectives. The process aligns perspectives while it nourishes diversity. Envisioning the future in images, text and emotions supports this individual and group reflection and opens heads, hands and hearts. Linking this vision to the tangible present provides a space for the inner and outer to interact: the process provides levers to participants for enhancing their transformative potential as a community.



## 7 References

- Adger, W. (2003) Social capital, collective action, and adaptation to climate change. *Economic geography* 79(4): 387-404.
- Adger, W. (2003) Social capital, collective action, and adaptation to climate change. *Economic geography* 79(4): 387-404.
- Alkire, S. 2002. Dimensions of Human Development. *World Development* 30: 181-205.
- Argyris, C. and Schön, D. (1978) *Organizational Learning: a theory of action perspective*, Reading MA: Addison-Wesley.
- Argyris, C. and Schön, D.A. (1996) *Organizational Learning II: Theory. Methods and Practice*, Reading, MA, Addison-Wesley.
- Avelino, F. (2011) *Power in Transition: Empowering Discourses on Sustainability Transitions*. PhD-Thesis. Rotterdam: Erasmus University Rotterdam
- Bass, B.M. (1999) Two Decades of Research and Development in Transformational Leadership, in *European Journal of Work and Organizational Psychology* 8(1): 9-32
- Bauler, T, Debourdeau, A., Baasch, S., Umpfenbach, K., Piotrowski, R. (2013). Alternative Collective Consumption and Production Niches - Lessons from their emergence development and governance. Download: [http://www.incontext-fp7.eu/sites/default/files/D3.3-Case%20studies%20Synthesis%20Report\\_Pleinary\\_Draft\\_Published.pdf](http://www.incontext-fp7.eu/sites/default/files/D3.3-Case%20studies%20Synthesis%20Report_Pleinary_Draft_Published.pdf) (accessed June, 2013)
- Bell, S. and Morse, S. (2012). *Resilient Participation. Saving the Human Project?* Milton Park: Routledge
- Burns, J.M. (1978) *Leadership*. New York, NY: Harper & Row.
- Burt, R. (1992) *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- Debourdeau, A., Bauler, T. and Baasch, S. (2011). WP3 – Case Studies: Research Guidelines. Common Methodology for Analysing Case Studies.
- Debourdeau, A., Baasch, S., Bar-On, H. and Umpfenbach, K. (2012). Case study Report - D3.2: Empirical report. Download: [http://www.incontext-fp7.eu/sites/default/files/D%203.2\\_Case%20Study%20Report%20Empirical%20Report%20-%20final\\_0.pdf](http://www.incontext-fp7.eu/sites/default/files/D%203.2_Case%20Study%20Report%20Empirical%20Report%20-%20final_0.pdf) (accessed June, 2013)
- Diepenmaat, D., Mager, S., Wittmayer, J. (2011). *Kwartiermakers van de toekomst. Case 16. Collectieve Zelfsturing in de Agrofoodsector*.
- Garmendia, E. and S. Stagl (2010) Public Participation for Sustainability and Social Learning: concepts and lessons from three case studies in Europe, *Ecological Economics* (69): 1712-1722.
- Gehmacher, E., Kroismayr, S., Neumüller, J., Schuster, M. (Eds) (2006) *Sozialkapital: Neue Zugänge zu gesellschaftlichen Kräften* –Vienna: Mandelbaum.



- Greenwood, D.J. and Levin, M. (2007) Introduction to Action Research. Social Research for Social Change 2nd Edition. Thousand Oaks: Sage Publications
- Grin, J. and H. Van de Graaf (1996) Implementation as communicative action: an interpretive understanding of the interactions between policy makers and target groups, *Policy Sciences*, 29 (4): 291-319.
- Grin, J. and A. Loeber (2007) Theories of learning. Agency, structure and change, chapter 15 (p. 201-222) in Frank Fischer, Gerald J. Miller, Mara S. Sidney (eds.) *Handbook of Public Policy Analysis. Theory, Politics, and Methods*, CRC Press, New York.
- Grin, J., Rotmans, J. and J. Schot (2010) *Transitions to Sustainable Development: new directions in the study of long term transformative change*, Routledge, New York.
- Häussermann, H., Läßle, D. and Siebel, W. (2008): *Stadtpolitik*. Frankfurt am Main: Suhrkamp.
- Isaacs, W. (1993) Taking flight: dialogue, collective thinking, and organizational Learning, *Organizational Dynamics*, 22 (2): 24–39.
- Jhagroe, S. and F. van Steenberg (forthcoming) Van koplopers naar koplopen: Een pleidooi voor emancipatie in transitiediscoursen. DRIFT essay.
- Kemp, R., Schot, J. Hoogma, R., (1998), Regime shifts to sustainability through processes of niche formation: the approach of strategic niche management, *Technology Analysis and Strategic Management*, 10(2): 175-196.
- Kemmis, S. (2010) What is to be done? The place of action research. *Educational Action research*, 18 (4): 417-427
- Kofman, F. and P. Senge (1993) Communities of commitment: the heart of learning Organizations, *Organizational Dynamics* 22 (2): 5–23.
- Lehtonen, M. (2004) The environmental–social interface of sustainable development: capabilities, social capital, institutions. *Ecological Economics* 49 (2): 199-214.
- Leßmann, O. 2011. Sustainability as a challenge to Sustainable Development. In Rauschmayer, F., Omann, I., Frühmann, J. (Eds.), *Sustainable Development: Capabilities, Needs, and Well-Being*. pp. 43-61. London: Routledge.
- Levin, M. (2012). Academic integrity in action research. *Action Research*, 10(2), 133-149.
- Lichtenstein, B.B. & D.A. Plowman (2009) The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels, in *The Leadership Quarterly* 20: 617-630
- Loorbach, D. (2007). *Transition management: New mode of governance for sustainable development*. PhD thesis. Erasmus University Rotterdam, Utrecht: International Books.
- Loorbach, D. (2010) Transition Management for Sustainable Development: a Prescriptive, Complexity-Based Governance Framework. *Governance*, 23, 161-183.
- Max-Neef, M., 1991. *Human scale development: conception, application and further reflections*. The Apex Press, London, New York.

- Miller, R.T., Wiek, A., Sarewitz, D., Robinson, J. Olsson, L., Kriebel, D. & D. Loorbach (2013) The future of sustainability science: a solutions oriented agenda. *Sustainability Science*. DOI 10.1007/s11625-013-0224-6.
- Nussbaum, M.C., 2000. *Women and human development: The capabilities approach*. Cambridge: Cambridge University Press.
- Nussbaum, M.C., 2011. *Creating capabilities: The human development approach*. Belknap Press.
- Pick, S. and Sirkin, J. 2010. *Breaking the Poverty Cycle: The Human Basis for Sustainable Development*. Oxford: Oxford University Press.
- Rauschmayer, F., Omann, I., Frühmann, J. (Eds.), *Sustainable Development: Capabilities, Needs, and Well-Being*. London: Routledge.
- Rauschmayer, F., Omann, I., & Frühmann, J. (2011). Needs, capabilities and quality of life: Refocusing sustainable development. *Sustainable development: Capabilities, needs, and well-being*, 1-24.
- Ronneberger, K. (2000): Die revanchistische Stadt. Überwachen und Strafen im Zeitalter des Neoliberalismus. In: In: Dinges, M. and Sack, F. (Hrsg.). *Unsichere Großstädte*. Konstanz: UVK. 313-332.
- Rotmans, J. & Loorbach, D. (2009) Complexity and Transition Management. *Journal of Industrial Ecology*, 13, 184-196.
- Schäpke, N. and Rauschmayer, F. 2011. InContext: Foundations of a common approach. Project report – Systematic Reflection and Theory Building – Protocol/ Handbook on Common Approach. [http://incontext-fp7.eu/sites/default/files/D2.1\\_Common%20Approach\\_0.pdf](http://incontext-fp7.eu/sites/default/files/D2.1_Common%20Approach_0.pdf) 18.07.2012.
- Schäpke, N., Rauschmayer, F., (2012): Addressing sufficiency – including altruistic motives in behavioural models for sustainability transitions. *UFZ-Diskussionspapiere 17/2012*. Helmholtz-Zentrum für Umweltforschung GmbH - UFZ, Leipzig, 25 pp.
- Schein, E. (1993) On dialogue, culture, and organizational learning, *Organizational Dynamics* 22: 40–51
- Sen, A.K. 1985. Well-being agency and freedom: The Dewey Lectures 1984. *Journal of Philosophy* 82: 169-221.
- Smith, A., (2006), Green niches in sustainable development: the case of organic food in the UK, *Environment and Planning C*, 24: 439-458.
- Smith, A., (2007), Translating sustainabilities between green niches and socio-technical regimes, *Technology Analysis and Strategic Management*, 19(4): 427-450.
- Thomas, K.W. and Velthouse, B.A. (1990) Cognitive Elements of Empowerment: An "Interpretative" Model of Intrinsic Task Motivation, *Academy of Management Review*, 15(4): 666-681
- Uhl-Bien, M., Marion, R. & b. McKelvey (2007) Complexity Leadership Theory: Shifting leadership from the industrial age to the knowledge era, in *The Leadership Quarterly* 18: 298-318.

- Van der Brugge, R., & Van Raak, R. (2007). Facing the adaptive management challenge: insights from transition management. *Ecology and Society*, 12(2), 33.
- Van den Bosch, S. (2010) Transition Experiments. Exploring societal changes towards sustainability. PhD-thesis. Erasmus University Rotterdam.
- WBGU (2011). World in Transition – A Social Contract for Sustainability. Flagship report. Download: [http://www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/hauptgutachten/jg2011/wbgu\\_jg2011\\_en.pdf](http://www.wbgu.de/fileadmin/templates/dateien/veroeffentlichungen/hauptgutachten/jg2011/wbgu_jg2011_en.pdf). (accessed: June 2013)
- WCED (United Nations World Commission on Environment and Development) 1987. Our Common Future. <http://www.un-documents.net/wced-ocf.htm> 03.04.2010.
- Wiskerke J., On promising niches and constraining sociotechnical regimes: the case of Dutch wheat and bread, *Environment and Planning A*, 35: 429-448.
- Wittmayer, J., van Steenbergen, F., Quist, J., Loorbach, D. and C. Hoogland (2011) The Community Arena: A co-creation tool for sustainable behaviour by local communities. Methodological Guidelines. Deliverable WP4. ([http://www.incontext-fp7.eu/sites/default/files/Methodological%20guidelines\\_final.pdf](http://www.incontext-fp7.eu/sites/default/files/Methodological%20guidelines_final.pdf))
- Wittmayer, J., van Steenbergen, F., Baasch, S., Feiner, G., Omann, I., Quist, J., Loorbach, D. (2012) Pilot projects on a roll. Year 2 pilot specific reports. Deliverable 4.3. InContext: EU ENV.2010.4.2.3-1 grant agreement n°265191.
- Wittmayer, J.M., N. Schöpke, G. Feiner, R. Piotrowski and S. Baasch (2013a) Action Research for Sustainability. Reflections on transition management in practice. Research Brief/Deliverable 5.2. InContext: EU ENV.2010.4.2.3-1 grant agreement n°265191.
- Wittmayer, J., F. van Steenbergen, S. Baasch, G. Feiner, M. Mock & I. Omann (2013b) Pilot projects rounding up. Year 3 Pilot-specific report. Deliverable 4.4. InContext: EU ENV.2010.4.2.3-1 grant agreement n°265191.
- Woolcock, M. (2001) The Place of Social Capital in Understanding Social and Economic Outcomes. In John F. Helliwell ed. *The Contribution of Human and Social Capital to Sustained Economic Growth and Well-Being* (Ottawa: HDRC)(Proceedings of an OECD/HRDC conference, Quebec, March 19-21, 2000).