

Pathways to Sustainable Living in Times of Crisis

Experiences from the EU action research project 'InContext'

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Abstract

How can people achieve sustainable lifestyles in the current economic crisis that both reduces inequity and enhances traditional economic thinking? Answering this question calls for new approaches and methods that go beyond current conceptualisations of consumption and strategies for changing consumption patterns. Such novel approaches should lead to new conceptualisations of consumption, as well as new methods and tools that are able to develop pathways and strategies towards sustainable consumption systems both in economic growth and in times of de-growth and austerity.

The interdisciplinary EU research project InContext has taken up this issue and develops and applies innovative methods to deal with societal challenges. InContext addresses the complexity of the contexts of individual behaviour by integrating both behavioural and structural explanations for individual behaviour, and taking into account both the inner context of individual behaviour, e.g. needs, values, cultural norms, as well as influences from the outer context. The latter comprises the systems the individual is operating in, including institutional context and laws; as well as their multiple interactions. As such it also is a core aim of InContext to foster sustainable communities, as they to a large extent establish this system the individual is operating in. The paper argues that understanding and systemising micro-level action and innovation is important to achieve the foreseen changes.

The paper will deal with the following parts of the project: First, at the individual level the theoretical framework is based on the capabilities approach and focuses on the fulfilment of individual needs through strategies that add to sustainable development. The capability approach contributes a normative, non-paternalistic description of the good human life. The capability approach has been extended by modelling the influence of values, learning, awareness and emotions on behaviour, whereas practice theory is used to embed individual behaviour in societal structures.

Second, case studies inquire into alternative consumption and production practices towards greater sustainability in both the energy and food domains. Case studies focus on the

conditions of emergence and diffusion of alternative and more sustainable niches, and how concerned actors individually and collectively cope with inner and outer context aspects to enact more sustainable lifestyles.

Third, action research, consisting of three pilot projects, incorporates the theoretical and case study findings into a transition management process. The process involves a group of frontrunners who go through a process of reflective learning, experimentation, awareness rising and capability development. These frontrunners develop a shared sustainability vision of their community and learn to initiate actions towards its fulfilment. Increased involvement and capability development will make communities more capable of dealing successfully with local sustainability problems both in prosperous and austere times.

1 Introduction

In 1992, increasing political and social awareness of the challenge of sustainable development resulted in the adoption of Agenda 21 at the United Nations Conference on Environment and Development in Rio de Janeiro, drawing attention to the need for increased efforts to initiate pathways to sustainable development at the local and individual level.¹ Over the last two decades, research into the limits of economic growth has reinforced the importance of such efforts and led to the devotion of considerable resources by governments, businesses, civil society to support local and individual level sustainable development policies and initiatives. These scattered efforts, while unsuccessful in steering mainstream social practices onto a sustainable pathway, have highlighted the strengths and weaknesses of existing approaches and stimulated innovative thinking on how to address the challenge of sustainable development.

However, with the onset of the global financial crisis in 2007/8, attention and priorities among many governments and policymakers have shifted decidedly away from the challenges of sustainable development and overconsumption towards more short-term and traditional economic growth policies. Despite a return to economic growth in much of the global economy, lingering concerns about economic performance in Europe and the United States, in particular the size of national deficits, has ushered in an age of austerity, marked by significant declines in public spending, higher unemployment and massive cuts to social programs. Accordingly, the world faces a scenario in which squandered opportunities to invest in sustainable development policies, such as the Green New Deal, in the early stages of the economic crisis is compounded by growing budget restrictions, and rising economic and social inequality.

Considering this panoply of challenges raises the following two **questions**: *How can people achieve sustainable lifestyles in the current economic and policy environment, while improving sustainable consumption practices? How can we go beyond current conceptualisations of consumption?*

Finding answers to these questions is of particular relevance in the run up to this year's Rio + 20 Summit, as world governments will soon convene to discuss the challenge of sustainable development with the benefit of two decades of hindsight. Current preoccupation with technocratic solutions under the Green Economy approach, however, indicates that the core problems of over-consumption will not be addressed. Developing appropriate solutions will require learning from past failed policies to develop new approaches, methods and tools that go beyond current conceptualisations of the problem of overconsumption, such as awareness raising and targeting the production system's eco-efficiency. These approaches and methods should address the inner and outer context of consumption and behaviour in an aligned and integrated way, and be applicable at the local and individual levels in order to take advantage of existing activities of local governments and communities, such as low-carbon and

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sustainability policies, as well as maximize local action. Furthermore, they must be able to develop pathways and strategies towards sustainable consumption systems both for times of economic growth and times of de-growth and austerity.

The interdisciplinary EU research project ‘Individuals in Context: supportive environments for Sustainable Living’ (abbreviated as InContext) has taken up this issue by working to develop and apply innovative methods for dealing with such societal challenges. It addresses the complexity of the individual behaviour contexts by taking into account both the inner (e.g. knowledge, personal interests, values, priorities and basic needs) and outer context (ex. politics, policies, infrastructure, social institutions, culture, habits, and lifestyles) of individual behaviour, thereby addressing both behavioural and structural explanations. An action research project, InContext complements knowledge gained from theoretical research and a series of in-depth case-studies with pilot projects aimed at developing and testing an innovative community based transition approach. These processes enable InContext to draw lessons on the adoption of sustainable practices, while exploring ways to facilitate sustainable citizenship, and address societal challenges by strengthening communities and improving well-being. The paper argues that understanding and systemising micro-level action and innovation is important to achieve the foreseen changes. The paper will deal with the following parts of the project.

The paper is organised as follows. Section 2 gives an overview of the background, organisation and assumptions of the InContext project. Section 3 deals with the issue of needs & need fulfilment and explains how this can be conceptualised using a refined capabilities approach. Section 4 reports on sustainable consumption niches. Section 5 introduces and describes the community arena, a participatory methodology involving local actors and citizens for developing visions and strategies for sustainable development and sustainable consumption at a local level. Finally, section 6 concludes with reflections in response to the following to questions:

- What can we learn from InContext with regard to a transition towards sustainable lifestyles and consumption patterns.
- What insights on innovative methods to deal with societal challenges, such as austerity, does InContext offer?

2 Core Concepts of InContext

Four perspectives

InContext distinguishes two strands of contexts determining the opportunities (drivers) and constraints (barriers) shaping individual behaviours related to sustainable development: the inner and outer context. This differentiation based on ideas of E.F. Schumacher (1977), which have been further developed by Ken Wilber (1995) as part of his Integral Theory. Integral Theory can be understood as a meta- framework of (holistic) understanding. It differentiates four basic perspectives on any phenomenon which are made up by the combination of individual and collective as well as on subjective and objective aspects of this phenomenon (Wilber 2001: 187).

Thus, the following four perspectives exist (see also table 1):

- (1) individual behaviour in its empirically observable dimension (for reasons of understanding we will call this in short: behaviour), which is the outer individual perspective, and deals with actions such as turning on the light, driving a car, eating² (UR),
- (2) individual experience, which is the inner individual perspective and deals with needs, feelings and values (UL),

² At the very basis these consist of physical, biological or chemical aspects of body, body parts, brain, organs etc. involved in behaviour. Due to the magnitude of possible different behaviours, we will not try to go into detail here.

(3) cultural and ethical aspects, which is the inner collective perspective and deals with social institutions, culture, habits, and lifestyles (LL).

(4) social and systemic aspects, which are the outer collective perspective and refers to systemic variables such as politics, policies, infrastructure, and organisations (LR).

As used in the project, the *inner context of individual* behaviour refers to the individual inner perspective (UL), whereas the *inner collective context* refers to the cultural perspective (LL). Finally the *collective outer context* refers to the systemic perspectives (LR). In this way we include individual and collective as well as subjective and objective aspects. Of course, there are far more elements than we can reasonably describe in this document. As their importance depends on the specific contexts, we remain rather generic here.

	Inner	Outer
Individual	<p>Individual Experience (e.g. needs, individual values, thinking and feeling)</p> <p>Upper left (UL)</p>	<p>Bodily expression of individual behaviour (e.g. movement of body: putting food in mouth, turning on the light)</p> <p>Upper right (UR)</p>
Collective	<p>Lower left (LL)</p> <p>Culture and ethics (e.g. social norms, cultural symbols, codes of conduct, social roles...)</p>	<p>Lower right (LR)</p> <p>Social, economic and ecologic systems (e.g. market economy, political institutions, infrastructure, ecosystems)</p>

Table 1: Four perspectives structure (cp. Schumacher 1977, Wilber 1995, strongly modified)

Policy interventions to further sustainable development have up to now primarily focused on addressing the external context in order to transform individual behaviour. Behavioural patterns and consumption modes, however, cannot adapt in a sustainable way without acknowledging the intrinsic importance of the individual. Current approaches analysing and enabling transition towards sustainable paths do not sufficiently take into account perspectives from within the individual, i.e. the internal context. Mass communication campaigns targeted at individuals and their mind-sets still frame sustainable development from the perspectives of policy makers and scientists and target the cognition of individuals, neglecting the deeper layers of the individual. Furthermore, the shift from production-based sustainability (e.g. the quest for product efficiency) to consumption-based sustainability calls for shifting attention to and targeting the cognition of individuals in new and innovative ways.

In this paper it is argued that addressing the external context alone is not sufficient to trigger mainstream sustainable behaviour at individual and collective levels. On the contrary, an integrated study of both the internal and external contexts is required as a base for both policy-making and empowerment of local communities.

Needs

How we are conceptualising the inner context and understand behavioural change is subject of the next section.

3 Individual needs and the capabilities approach³

Lifestyles are sustainable when their implementation does not hinder the ability of others to meet their needs, either now or in the future. InContext addresses individuals confronted with this societal challenge and aims at developing a model that can explain some of the key issues related to this confrontation. Specifically, InContext goes beyond usual approaches to transition management (cp. section 5) to include the *inner* context of behaviour, i.e. the needs, values, beliefs, etc. of individuals in the context of achieving sustainable lifestyles. Here, we build on the importance of needs for individuals (Reader 2005).

There are two reasons for addressing the concept of needs: (1) the parallel to the Brundtland definition of SD (at least in wording, as the Brundtland Commission had a different, more concrete understanding of needs; cp WCED 1987) and (2) the link between needs and well-being: meeting needs has a direct positive emotional effect (Spillemaeckers et al. 2011), implying that talking about needs has the potential to reach the hearts and not only the heads of people, an essential issue in achieving sustainability transitions (Rauschmayer et al. 2011).

Following Max-Neef (1991), we distinguish between fundamental human needs that are abstract, few, and finite in number (such as: freedom, affection, or subsistence) and strategies meant to satisfy these needs (such as: owning a car, caring for parents, eating a bowl of rice). This needs-concept allows people to identify with and connect to one another (even across generations), as everybody has the same needs. The differentiation between needs and strategies allows us to distinguish a level of connecting needs from a level of concrete behaviour, which may differ for individual, social, or environmental reasons between individuals (also compare Guillen-Royò 2010, Jolibert et al. 2011). Basically, we start with rudimental behavioural model: people select strategies in order to realize their needs. Realizing their needs can be equated with realizing their human flourishing.

Two reasons necessitate the further inclusion of the concept of freedom into this behavioural model: (1) *Uncertainties and complexities* as well as (2) *paternalism*.

(Ad 1): Leach and colleagues (2010) argue that uncertainties and complexities are necessarily related to questions of sustainability: due to uncertain causal relationships, novelty, but also to changing normative frames of what is to be sustained. Therefore, they argue that approaches to sustainability must be increasingly procedural and actively involve stakeholders rather than using outcome-oriented models based on scientific knowledge. Stakeholder processes imply the use of local knowledge and the acceptance or even the encouragement of changing values, therefore, they must include freedom in their design if effectiveness and legitimacy are to be achieved.

(Ad 2): Paternalism might result in dependency or refusal by the paternalized. In the 1980's, needs-related concepts such as the Basic-Needs-Approach (e.g. Streeten 1981) have been understood as paternalistic approaches to human development (Leßmann 2011). While freedom might be categorized as a fundamental need (as Max-Neef does), Amartya Sen gave

³ A more extensive version of this chapter can be found in Schöpke/Rauschmayer 2012.

freedom a place of still higher importance when evaluating a person's well-being not only by the doings and beings this person achieves, but also by the freedom to live in different ways. When developing the capability-approach, he argued for a more conceptual embedding of needs-based approaches, claiming that the Capability Approach is suitable for this task (Sen 1983: 515).⁴

While we do not wish to diminish the difficulties of the Capability Approach for sustainability issues (see on this Leßmann 2011, Leßmann & Rauschmayer 2012), it still has another important advantage (Rauschmayer & Leßmann 2011), i.e. the explicit acknowledgment of other-regarding motivational sources for behaviour. These sources are particularly important for sustainability issues – as sustainable development essentially is about caring for the powerless: the world's poor and future generations. Acknowledging that people may achieve some doings or beings because they intrinsically care for the well-being of other persons, distinguishes the Capability Approach from other current approaches used for policy evaluation which are based on a narrow utility-maximising image of man.

While the Capability Approach mainly considers measures of extrinsic empowerment and focuses on the outer context in the context of human development programmes, it can also be employed in combination with psychological approaches (such as the theory of planned behaviour, Ajzen 1991) for dealing with the inner context and intrinsic empowerment (cp. Pick & Sirkin 2010). Compared to the field of human development, however, the issue of sustainability requires a specific focus on normativity and other-regarding motivation (DiGiulio et al. 2011). Therefore, the model of personal development has to be combined with additional models e.g. norm-activation theory etc.

To begin our explanation of Figure 1 we focus on the key aspect we want to explain and influence within InContext: the behavioural strategies. From here we follow the assumed influences between the different variables backwards along the arrows. Within the Needs-Opportunities-Abilities approach, the individual behavioural strategies are thought to be dependent on the intention of a person to behave in a certain way (Gatersleben and Vlek 1998). This implies that we focus our analysis on behaviour that is chosen consciously. Behavioural routines and habits are therewith not in the centre of attention of the model. Behavioural intentions depend on the a) perceived possibility to choose a strategy as well as on the b) motivation of the individual (ibid.).

a. Possibilities to choose (here used synonymously with capabilities) depend on the given opportunities to behave, which depend on outer context resources and conversion factors (natural, social, economic, etc.) available to the individual. Capabilities also depend on the personal abilities to use these resources; these abilities are determined by personal agency, well-being, personal skills and knowledge.

o Personal agency is understood as “the ability to define one's goals in an autonomous fashion” (Sen 1985, as stated in Pick & Sirkin 2010: 68). Agency also includes the freedom to orientate one's life according to one's values, i.e. to improve one's own well-being or to improve the life of others (Leßmann 2011). These values again are influenced by cultural and social aspects, as depicted by the arrow coming from the outer context to personal agency. Individual well-being as well has impacts on the abilities of a person to behave.

o Well-being includes the objective standard of living of a person, such as health, income etc., and subjective, psychological elements like happiness or feeling content. It relates to his or her own standard of living as well to the standard of those persons dear to him or her.

o Skills and knowledge are understood in a general way including e.g. education or work experience. With regard to the InContext goal of fostering sustainable behaviour, those skills

⁴ However, the relationship of normativity and paternalism remains a subject of discussion within the project team. Some project team members argue that normative approaches that aim at fostering sustainability remain intrinsically paternalistic.

and knowledge contributing to sustainable development are of central interest here (cp. Ott 2002).

b. Besides the possibility to choose a strategy, motivation is an important factor determining behavioural intentions. The assumption that motivation to behave is fuelled by individual needs and the perceived abilities to behave lies at the core of our behavioural model: people carry out behavioural strategies to meet needs. Gatersleben and Vlek discuss a number of different concepts of needs, including that of Max-Neef (Gatersleben & Vlek 1998). Due to differing use of the term ‘needs’, we reiterate that by needs we mean the most fundamental dimensions of human flourishing.

In our circular model we assume two types of feedback processes: First, the repercussion of experiences with behavioural strategies on individual skills (experience, learning), well-being (by needs getting met), and personal agency (e.g. due to experiencing own abilities to change something). This “individual inner” feedback loop from behaviour to agency and well-being is in line with the idea of intrinsic empowerment developed by Pick and Sirkin already sketched in section 3.2. Second, behavioural strategies impact the collective context aspects, e.g. by maintaining or questioning social or political institutions and policies or by changing the impacts of consumption on natural resources. This second feedback loop leaves room for the idea of co-evolution and joint development of individual and collective context aspects and behavioural strategies. Impacts of individual behaviour changes on elements of the collective context will generally remain rather low. At the collective level, on the other hand, transition arena processes (cp. section 5) may facilitate such feedback. In terms of outcome evaluation, however, the impacts of behaviour on the collective context play another important role in InContext, as they determine whether we judge a specific behaviour to be sustainable or not.

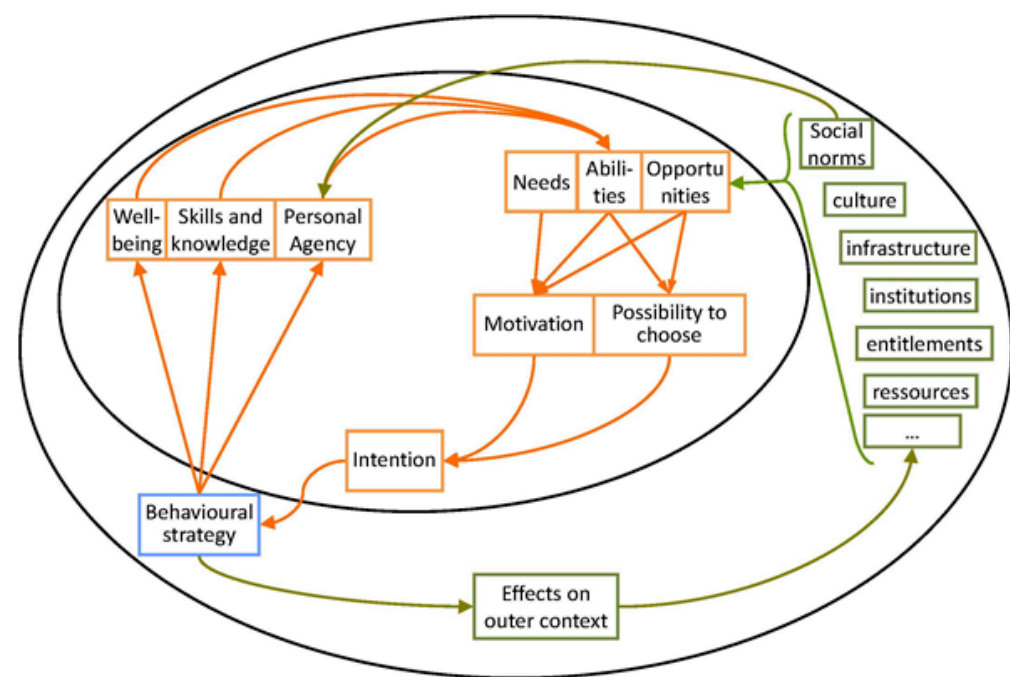


Figure 1: Aspects influencing individual behaviour – a feed-back model (source: Schäpke and Rauschmayer 2012)
Caption: individual inner context: orange, individual outer perspective: blue, collective inner and outer context: green

4 Pathways to sustainable consumption niches

4.1 Introduction

Much of today's debate on rethinking our consumption patterns is concentrated on promoting eco- and material-efficient products/services, or to advocating patterns of sufficiency. Both strategies – and their promoters – are often seen as being exclusive and in tension with one another. In reality, there is a third set of strategies which intend to develop an alternative lever of action in so far as they question some of the foundations of today's system of exchange of goods and services between producers, retailers and consumers; i.e. they question markets as being the only thinkable, feasible, efficient and equitable institutions of exchange. Such strategies of “*de-commodification*” (Boulanger 2008) take many forms, but generically consist of substituting non- (or differently) commercialized exchanges for commercial (or market-based) ones. In other words, *de-commodification* is in most instances about fundamentally changing the nature of a consumer, of a producer, of their relationships to a product (or service) and of the structures and norms of the exchange. From a sociological perspective (Hinrichs 2000; Murdoch, Marsden and Banks 2000; Winter 2003) these strategies of *de-commodification* have been analysed as a matter of *re-embedding*⁵ current exchange relations into their soci(et)al networks and cultures. As a reflex in times of crisis – parts of its origins being undeniably economic and market-defined – *re-embedding* and *de-commodifying* parts of our consumption might be a worthy avenue of thinking.

In other words, parts of the analytical energy to think, conceptualize and enhance pathways of sustainable living should be devoted to improving our understanding of initiatives that grow ‘organically’ into more sustainable livelihoods by questioning the fundamentals of our consumption patterns. While macro-reflections in such directions have existed for some time (e.g. for France: Ayres 1996, Gorz 1975, Illich 1973, Latouche 2006), only recently have efforts (Seyfang & Smith 2007, Shove & Walker 2010, Smith 2006, Spaargaren *et al.* 2011, Tukker & Butter 2007) been devoted to systematizing observations – and thus understanding – micro-initiatives operating (at least partly and mostly in an implicit manner) a *de-commodification* strategy to consumption.

Consequently, parts of the InContext project investigate the **patterns of emergence, solidification and diffusion of existing ‘alternative’ consumption niches**. This sub-objective fundamentally boils down to the posing of two core questions: How to qualify, define and circumscribe *niches* when the focus of analysis is put on alternative consumption/production patterns? What are the dynamics that co-organize the evolution of such consumption *niches*?

4.2 Underlying concepts and research questions

The systematization of the observation of **consumption niches** is enabled by the existence of a (relatively) common framework of analysis emerging from research. The building blocks of this framework are anchored in Transition Management/Approaches, Socio-technical Innovation Studies, Practice Approaches/Theory, Reflexive Modernization/Governance and Institutional Economics/Politics. We will briefly elaborate on the main building blocks of these approaches before discussing the case study approach chosen to implement the empirical analysis in InContext.

Epistemologically, and heuristically, *Transition Approaches* – and their interventionist form *Transition Management* (Loorbach 2007) – are the overarching references, themselves

⁵ See also the work on *embeddedness* by Polanyi and by Granovetter, which is mirrored by Giddens for whom modernity is co-defined by processes of *dis-embedding*, i.e. of “*lifting out of social relationships from local contexts and their recombination across indefinite time/space distances.*” (Giddens, 1991 : 242).

grounded in (*Socio-technical*) *Innovation Studies* (Geels 2004; Rip 2006; Kemp *et al.* 1998). Applying a Transition Approach to consumption patterns implies the consideration of ‘alternative’ consumption patterns as societal (or socio-technical) consumption *niches* which emerge in partial contradiction to (or in the context of) the ‘usual’ way of consuming/producing (i.e. the regime). This process is similar to that of technological innovations, which emerge as commercial niches before spreading over their market (i.e. the regime). A fundamental objective of InContext is better understanding the interaction, resistance, and integration of niche-type consumption/production patterns with the regime. How do the ‘alternative’ and the ‘normal’ consumption/production patterns interact and influence each other? Consequently, *InContext* focuses on both the analytical qualification of consumption/production niches (i.e. enhancing our understanding of their very nature), as well as the exploration of their evolution (i.e. exploring the pathways they take).

The observation of interactions between consumption niches and their regime is all the more vital, because niches tend to constantly adapt and redefine themselves as a consequence of such interactions; e.g. some characteristics of the niches are integrated into the regime, or niches evolve to form part of the regime. Such **diffusion processes** of consumption niches have been identified in InContext to take two basic forms: a) consumption (and lifestyle) niches, which increase in size, in participants, in consumers adopting the niche model; e.g. they enlarge. b) Consumption niches, which are “copied” elsewhere into different contexts, e.g. they are replicated. A specificity of consumption niches with regard to their diffusion is that these dynamics of evolution have been observed⁶ as being potentially lethal to some forms of alternative consumption/production niches in as far as the ‘alternative’ is necessarily defined by opposition to the ‘normal’, and consumer/producer motivations to invest into participating in niches also depend on the degree of ‘alternativeness’ of the consumption/production pattern itself, a characteristic which invariably tends to vanish when niches engage with regimes.

In InContext, we try to identify and account for **contextual factors** which allow to understand the diffusion of such consumption niches by adopting two distinct perspectives: a) depicting the ‘external’ factors, which influence the niche formation and evolution; e.g. what governance mechanics do public authorities develop with regards to the niche?; b) rendering the ‘internal’ factors, which define the main, most important, niche characteristics; e.g. what is the role of personal motivation?

Conceptually, the exploration and qualification of the adoption and diffusion of consumption niches builds on two distinct underlying building blocks. On the one hand, we focus on an analysis of contextual and internal factors which form into ‘**configurations that work**’ (Rip & Kemp 1998), i.e. which interlink (and allow to underline) the heterogeneous set of undetermined elements that form an alternative consumption niche in its very specific configuration of enabling (and disabling) factors. On the other hand, a focus is given to the analysis of the ‘**collectives**’ that form the consumption niches.

Methodologically, a bottom-up - almost ethnographical - approach was chosen to perform the analyses. After developing four detailed case study analyses we try to identify some recurrent explicative ‘traits’ in the emergence and diffusion of consumption niches. The objective is not to adopt a comparative approach, as we do not control for context variations for instance, or to identify the causalities of a ‘successful’ emergence and diffusion of niches. The particularities, and strong contextualisation, of niches do not allow for such approaches. The objective is rather to concentrate on the investigation of the richness and complexity of such individualized alternative consumption patterns, a perspective which is reinforced by the fact that we adopt **practice theory** (Shove & Walker 2010; Ropke 2009) as an entry point for explaining consumption patterns in their specific societal settings. Practice theory

⁶ For a detailed observation of such a disturbance of a niche in the organic farming/consuming sector, see Smith (2006).

approaches, i.e. a meso-level analysis, allow investigating consumption beyond the influence of a specific (micro-level) ‘artefact’ (i.e. a technological object). It allows situating the practice of everyday lives in the ‘societal’ context of large-scale socio-technical innovations (i.e. the macro-level evolutions which define society).

4.3 Overview of case studies and emerging questions of governance

The exploration of pathways to alternative consumption patterns and living is operated through a series of 4 in-depth empirical case studies. Case studies have been selected in different socio-political settings, in different countries, on different consumption domains. The intention being not to develop a comparison, we targeted case studies to allow for a maximum of variety in order to catch that necessary richness of insights. Empirical explorations are grounded on extensive document analyses, a series of in-depth interviews with engaging consumers (and where applicable, with producers), a face-to-face Participatory Network Analysis as well as on-site observations.

Table 2: Case studies of consumption ‘niches’

<i>Niche</i>	<i>Country</i>	<i>Nature of the ‘collective’</i>	<i>Consumption domain</i>	<i>Synthesis description</i>
GELA GEmeinsam LAndwirtschaften	Austria	A community-supported agriculture project	Vegetable and fruit production, distribution and consumption	Gela is the first Community-Supported Agriculture project in Austria. Consumers sign up in advance for a one-year or a season provision of organic vegetables grown at a local biodynamic farm The CSA is co-managed by a group of active consumers and the farmers.
Veggie-Thursday	Belgium	A Not-for-profit organisation	Promotion of vegetarian/vegan food consumption	In 2009, the “Thursday Veggie Day” (TVD) is launched in Ghent promoting vegetarianism, with the support of the municipality in order to promote the adoption of a veggie/vegan day a week as a commitment towards sustainability, health and animal suffering.
Wolfhagen 100% RES	Germany	A Local Authority	Local renewable energy production	The city of Wolfhagen aims to cover, by 2015, its entire communal energy need (households, commercial and industrial business) with locally generated renewable power plants.
Emission-Zero	Belgium	A consumer-producer cooperative	Local renewable energy production and consumption	Promotes socially-aware wind projects and short electricity supply chains. It also actively supports a model based on a locally generated renewable energy owned by the citizens/residents.

Each of these case studies is extensively analysed by focusing on a set of common research questions: a° what internal and external factors form the ‘configuration that works’ and that enabled the creation and emergence of this particular niche of alternative (sustainable) consumption and production practice?; b° to what extent these configurations highlight possible pathways of diffusion of these niches?; c° what forms of governance developed in the niches and collectives, how are these niches and collectives governed by public authorities and how both forms of internal and external governances interlink and co-evolve?

With regard to the last set of questions related to the governance mechanics of niches and collectives, case studies show that there is no clear emerging governance pattern of ‘one size fits all’, which would enable the ‘successful’ patterns of diffusion of the niches. These niches, being very diversified in nature, clearly develop different patterns of diffusion, ranging from a simple enlargement to ‘new’ adherents (i.e. as it is observable for the Veggie-Thursday) to a much more complex pathway of allowed - or even supported - replication in to different locations (e.g. as is the case for GELA, itself being a replication of a German CSA). As a consequence of such diversified ‘configurations that work’, and diffusion patterns of the niches, the forms of governance by public authorities are at least as diversified. In GELA, public authorities, both local and national/European, interact very sparsely with the niche almost to a degree of mutual ignorance and virtual non-interaction. Emission-Zero on the other hand is relatively strongly framed by public regulation (e.g. by the regulatory reference framework for renewable energy, or by the regulatory framework for cooperatives), but is clearly a citizen-initiative with hardly any public support or interest. The Wolfhagen case can in some of its perspectives be understood as a case of public engineering, in as far as it is public authorities and actors who conduct the entire process. Finally, Veggie-Thursday is a civil society initiative with strong backing and empowering by public, local authorities (e.g. the city of Ghent finances much of the initiatives and is the first public actor to integrate the Veggie-Thursday scheme in its internal, administrative functioning).

As a consequence for public authorities, the governance of such niches and collectives, and be it only the passive tolerance of such societal initiatives, is increasingly difficult to conceive and implement. Even a very prudent implementation of a micro-level governance in terms of a loose promotion of civil initiative experimentations might not adequate depending on the niche and collective. In other words, even adaptive governance schemes might not be totally satisfactory, in the sense that some niche and collectives are very sensitive to any type of attempt of governance from the outside. Again, in some instances, it is the degree of alternativeness (also towards public actors) that profoundly defines the very nature and being of the niche and collective.

In a series of future analyses, and notably by crossing our observations from the case studies with those from the transition management experimentations (see below), we expect to be able to refine the level of detail on the needed (or to be avoided) governance mechanics.

5 Community Arena: changing inner & outer context at local level

5.1 Transition Management and Backcasting

Long-term transitions and system innovations to sustainability call for participatory, integral and systemic approaches, such as transition management (Rotmans et al 2001; Loorbach 2007; Loorbach 2010) and participatory backcasting (Robinson 2003; Quist & Vergragt 2006, Vergragt and Quist 2011; Quist 2007; Giddens 2009; Robinson et al 2011). As a form of transition governance transition management (TM) has rapidly emerged over the last decade as a new approach dealing with complex societal problems and the governance of these problems towards sustainability (Loorbach 2007, 2010). Participatory backcasting (BC) builds on a longer tradition of non-participatory, expert-led studies, but since the mid-1990s a strong participatory branch has developed in countries like the Netherlands, Sweden, Canada and the UK.

Both approaches are used to develop desirable future visions, new narratives and agendas as well as to support a process of coalition building and learning among involved stakeholders. Transition management focuses on a group of individuals (called frontrunners)

who come together in a series of meetings to agree on a shared problem description, formulate guiding principles for a sustainable future and determine pathways for how this vision is to be achieved. Participatory backcasting follows similar flow and has been defined as "generating a desirable future, and then looking backwards from that future to the present in order to strategize and to plan how it could be achieved" (Vergragt & Quist 2011: 747). It may but does not always include a focus on implementing and generating follow-up activities contributing to bringing about the desirable sustainable futures.

It has been shown that participation in backcasting processes leads to individual and group learning through interactive vision development and assessment, in particular through meetings, discussions and other ways of (structured and facilitated) interaction (e.g. Van de Kerkhof & Wieczorek 2005; Quist et al 2011). Moreover, impact, in the sense of spin-off, implementation of the agenda, changing discourses and related attitudes of dominant actors, or the decision to pursue other ways can be pointed out in transition management (Loorbach & Rotmans 2010), whereas in participatory backcasting spin-off and follow-up activities could be found after 5-10 years (Quist 2007, Quist et al 2011). Whereas both transition management and backcasting have been applied to address a variety of issues on different scales, the application to consumption and local settings is still limited, though some examples can be found (Quist et al 2001, Green and Vergragt 2002, Carlsson-Kanyama et al 2007, Kok et al 2006, Eames & Egmosen 2011; Spekkink et al. forthcoming).

Both approaches share a strong focus on stakeholder involvement, stakeholder learning and the development and assessment of desirable future visions, including turning the latter into actions and action agendas. First and second order learning can be distinguished. In the group setting, first order learning takes place through the introduction of new knowledge whereas second order learning is conceptualised to take place through consciously confronting and questioning different worldviews and perspectives and their underlying values and beliefs (i.e. interpretive frames). All this happens in a social setting and through interaction, which links to concepts of social learning (see Garmendia & Stagl 2010 for a discussion on social learning). In addition, diffusion of learning is important, which takes place through individuals who are able to disseminate and embed it within their organisation or network. This calls for involving what is in TM being referred to as front runners that have the ability to become change agents.

Table 3 outlines more similarities and differences between transition management and participatory backcasting. For a more elaborate discussion on the differences between TM & BC see Wittmayer et al 2011a; 2011b).

Table 3: Similarities and differences between transition management and participatory backcasting

<i>similarities</i>	<i>differences</i>
<ul style="list-style-type: none"> - Stakeholder participation, focus on actor/stakeholder level - Shared vision development - Higher order learning by involved stakeholders - Turning long-term visions into short-term actions & agendas - Stakeholder commitment to results & agendas 	<ul style="list-style-type: none"> - TM is rooted in transition theory building on the Multi-Level Perspective, BC is agnostic about system innovation theory and niches - TM has a stronger focus on developing a shared problem definition - In TM implementation and follow-up is key, whereas in BC it is more an add-on\ - BC has larger methodological diversity, TM has a more focussed profile

5.2 Development of the Community Arena methodology

This section presents the methodological framework of the community arena, a co-creation tool for sustainable behaviour by local communities. The developed methodology builds on transition management (especially as applied in the deprived Rotterdam neighbourhood of Charlois, see Spekkink et al, forthcoming) and participatory backcasting for sustainable households which involved both traditional stakeholders in workshops and consumers through focus groups (Quist et al 2001, Quist 2007, Green and Vergragt 2002). The methodology has also been enriched with inner & outer context distinctions based on insights from social & environmental psychology, learning theories on both individual and group level (see Wittmayer et al 2011a) and the discussion in Section 3, in particular the capability approach.

The concept of learning is used to understand how changes in the inner context of the individual can be connected to the collective level of all individuals in the community arena, as well as for diffusion outside the community arena (see for a discussion of this, Brown et al 2003). Learning is essential for dealing with complexity and uncertainty. According to Garmendia & Stagl (2010) individuals are indeed the learners, but the learning process takes place in social settings and is socially conditioned. This social setting can enhance and stimulate second order learning, which is understood as 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 & Loeber 2007; Grin et al. 2010). This kind of learning is based on the capacity to question the assumptions that underlie one's actions, values, and claims to knowledge, which again relates to changing the inner context. Please note, that raising awareness at the individual level links to extending what is consciously considered and decided upon.

The outer context is targeted through the development of normative future visions for a local community by a small group of frontrunners from this community. After having jointly defined the problem at stake, main principles for guiding the development of the future vision are agreed upon. The future visions and pathways towards future visions are developed based on the ideas, input and creativity of the group. This includes one or several sketches or images of a desirable sustainable future for the community which can be an (urban) neighbourhood or a (rural) municipality. These images describe not only the outer context of a desirable future, but will include also views on the inner context, e.g. changes in beliefs, preferences, values, capabilities, both at the individual level and at the group or collective level.

Though an explicit distinction was made above between the inner and outer context of individual behaviour, it should be noted that they are inter-related, mutually influence each other and co-evolve in a process that not only results in awareness and empowerment for sustainable development, but also in changes for making the local outer context (more) sustainable. Crucial is that the individual inner context does not change isolated from its context, but that the individual process is embedded in the collective group process in which learning and identity at the group level evolves too.

In short, the community arena focuses on articulating, confronting and connecting individual inner contexts in a participatory process so as to collectively reflect on (un-)sustainable perceptions and behaviour. The premise is that by raising awareness and sensitivity amongst engaged citizens about other ways to look at reality, they open up to new opportunities to (i) think about their individual behaviour in the broader societal context, (ii) to consider alternative more sustainable strategies for need fulfilment and (iii) to enhance possibilities for changing the inner and outer context in pursuit of sustainability.

Based on the discussion above, the community arena methodology has been developed, consisting of phases/steps, preceded by a pre-preparation phase/step. Each of these phases has

a different function in the process and generates different outputs. The process consists of at least five participatory meetings (for a more elaborate description see Wittmayer et al. 2011a), in which different methods and instruments are planned. Table 4 shows the phases, as well as their key activities and outputs.

Phases of the Community Arena		
	Key activities	Key output
0. Pre-preparation	A. Case orientation B. Transition team formation	A. Initial case description 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 + *meeting C. Selection of key priorities D. Participatory vision building + *meeting	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 (*meeting) B. Formulation agenda and specific activities + meeting 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 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 + *meeting 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; *meeting

The community arena, as a participatory approach for initiating and supporting reflection and action to sustainable development, bears the promise of being one possible approach addressing the societal challenges we face in terms of e.g. the current economic crises or when aiming for enhancing austerity. The methodology contributes to capability building and empowerment at community level aiming to make local communities and their members more resilient to structural uncertainties and incidental shocks. By combining the individual and bottom-up level on the one hand, with the long-term vision development, governance,

agency, broad stakeholder involvement and implementation focus of TM/BC, it may contribute to the next generation of Local Agenda 21 initiatives.

5.3 Variety and diversity in three participatory pilots

The community arena methodology is currently being applied through an action research approach in three local communities in Austria, Germany, and the Netherlands. For selecting these pilots, a strategy of diversity and variety has been employed, as can be seen from the characteristics shown in Table x. This exploratory approach allows for learning from the differences in the pilots, thereby increasing the range of learning.

Table 5: Some characteristics of the three pilots

	Finkenstein (A)	Wolfshagen (D)	Carnisse (NL)
Inhabitants	8.509	13.840	10.533
Type of community	Market town consisting of a conglomerate of twenty-eight villages of which six are dominant, situated at the border of Austria with Slovenia	rural town (with a core city and eleven rural districts), situated in the centre of Germany	Urban neighbourhood of Rotterdam, situated in the West of the Netherlands
Characteristics	decentralised structure, conflict of interest between tourism, population and industry, hardly any community meeting facilities, two language groups	high percentage of commuters, population decline, frontrunner in renewable energy, fading city centre	deprived neighbourhood, high turnaround of inhabitants, severe budget cuts threaten the continuation of main community facilities, around 170 nationalities and high migration

6 Reflections on potential insights

How can we achieve a sustainable lifestyles in the face of the current economic crisis? The EU funded FP7-project InContext attempts to identify innovative responses to these societal challenges. The project objective is to facilitate pathways towards alternative and sustainable behaviours of individuals to foster collective activities towards more sustainable communities. This section summarizes preliminary insights into potential responses and outlines preliminary conclusions with regard to how new conceptualisations of consumption can be achieved.

The distinction between basic needs, strategies (i.e. any concrete action, which we define as attempts to fulfil a basic need), and capabilities build the core of InContext's theoretical approach. We conceptualise the shift to sustainable lifestyles including changed consumption patterns as a function of actors' awareness of their own and other's needs and the translation of these needs into actors' strategies. The distinction of needs, strategies, and capabilities guides our attention to the fact that humans can apply a variety of strategies to satisfy basic needs. However, in daily life, we are rarely aware of this distinction and actions are regarded as if they are ends in themselves; fundamentally existing choice goes unrecognized and path dependencies seem to profoundly determine individual and collective action. If concrete actions, like consuming a certain good, are perceived as a pathway or means to achieve something else (e.g. the need for freedom) an actor's notion of potential alternative pathways might expand because they can also be achieved alternatively.

At the same time, it is quite obvious that behavioural change will not be induced by the mere awareness of actors that they could engage in alternative practices to meet their needs. Actors are caught up in their habits, norms, peer expectations, structural factors, etc. This is where the concept of capabilities comes into play. Certain circumstances can encourage actors to broaden their view, to perceive alternatives and to actively engage in alternative practices. InContext tries to identify key elements of these circumstances, and to create supportive environments that enable actors to engage into new practices. InContext will translate these findings into policy recommendations at a later stage of the project. InContext looks at and implements micro-level initiatives towards sustainable development by looking at two types of transition examples: niche development (investigated by our case studies) and community arenas (as implemented by our pilot projects).

We assume that the dynamics of the niche development (as described in the case studies) as well as of the community arenas (as facilitated by the pilot projects) have several elements in common. Both approaches, the niche developments as well as the community arenas, share characteristics that might be instructive for understanding their potential to induce innovative change with regard to lifestyles as well as consumption patterns. In the following paragraphs, we give a first glimpse of possible insights into these characteristics, that could also provide cornerstones for the future project's recommendations. The list is neither complete nor final and mainly serves to share and discuss our thoughts within the research community:

- **Joint processes:** Both approaches InContext is studying emphasise the importance of joint processes like emerging processes within social networks (in the case of niche development) respectively or facilitated group processes (in the case of transition management). For the case studies, the driving forces for these processes seem often related to the wish to draw borders to mainstream behaviour while in the transition arena, it is more social learning that inspires/motivates individuals to take action.
- **Taking into account inner factors:** Both approaches decisively depend on inner factors, such as personal motivations or actors' wishes to fulfil their needs in an alternative and more sustainable way.
- **Investigating and creating supportive environments:** The case studies pay attention to the surrounding factors that support the creation of alternative niches. We try to identify key features that allow experimental approaches to be put into practice and to be sustained for a sufficient time period to make the project viable. In the pilot projects, we actively try to create supportive environments for sustainable living that enable people to identify and implement alternative strategies to fulfil their needs (the terms 'needs' and 'strategies' understood as outlined in chapter 2).
- **Provide room for experiments:** One of the key features for supportive environments to emerge seems to be that there is sufficient room for experiments. This means that actors need to enjoy a certain degree of liberty: be it that existing rules and procedures are applied in a less stringent way or that these actors find ways to financially sustain themselves for a certain period of time irrespective of the economic success of their project. Transition arenas try to create this room for experiments by involving and inspiring relevant actors that are necessary to implement the project in the respective local community. Though room for experimentation is less actively created in the case of niche development as analysed in the case studies, they in fact are the result of experimentation processes. At the same time, case studies show that the governance of such experimental environments is far from easy, and above all far from being generalizable.
- **The role of frontrunners:** Frontrunners seem to be essential for the emergence of alternative practices at the micro-level. In all four case-studies, it was the vision and the driving power of individuals that was essential for making alternative practice a

reality. This phenomenon is also reflected in the set-up of the community arenas that are specifically designed to address and favour the emergence of frontrunners in local communities. The question remains open whether the stimulation of frontrunners remains a project-duration limited dynamic, or whether such stimulation can develop into long term self-sustaining dynamics.

- **Dynamic conceptualisation of drivers and barriers:** It seems that the traditional concept of ‘drivers’ and ‘barriers’ for transition fails to go into sufficient depth. First, circumstances that could be regarded as drivers towards a certain transition at first can become barriers over the course of time (e.g. when practices that have been developed out of a motivation of being “alternative” or “rebellious” lose their attraction their creators once they become more mainstream). Second, for understanding human behaviour, it might be more useful to regard ‘barriers’ not as ‘barriers to sustainability’, but rather as driving forces for the fulfilment of other basic needs of the actors. This shift opens the scope to identify potential alternative practices that serve both the environment and the actors’ individual well-being.

This is what so far can be concluded as regards the emergence of innovative practices at micro-level. As regards their broader uptake – precondition for a visible impact of such initiatives – for example through diffusion, upscaling or broadening the scope of such initiatives remains an open question up to now that we aim to tackle during the remainder of the project.

InContext is at the time of writing this paper (April 2012) midway through the project period. This paper introduces key elements of the project. The main purpose is to provoke discussions about our approach at a sufficiently early stage in order to generate input that we can still implement during the second half of the project.

InContext attaches considerable importance to the applicability and distribution of its research results. We will, therefore, continue to discuss preliminary results of our research through the usual academic canals, but even more so in dedicated ‘reality check fora’, in which we invite representatives of local governments to see how our findings resonate across different geographic and cultural regions of Europe.

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