

FOOD4SUSTAINABILITY

Collective action for sustainable food systems in a changing climate: assessing social experimentations and policy innovations

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Axis 5: Major societal challenges



NETWORK PROJECT

FOOD4SUSTAINABILITY

Collective action for sustainable food systems in a changing climate: assessing social experimentations and policy innovations

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FINAL REPORT

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1. ABSTRACT

Context

The provision of food from agricultural inputs to distribution, contribute significantly to greenhouse gas emissions worldwide and exert an important pressure on natural resources. Reforming food systems towards greater sustainability is therefore essential for a transition towards a low-carbon and resource-efficient society.

Objectives

This project aimed to explore the role of the transformation of motivations, values and visions in the transition of the agri-food system and specifically of the instrumentality of hybrid governance arrangements—arrangements in which both actors of the mainstream agri-food system and actors from niche/grassroots innovations participate. We identified three transition pathways for which we formulate recommendations: (1) change led by grassroots innovations, (2) change led by mainstream actors and (3) hybrid arrangements.

Conclusions

Our research has demonstrated that 1) successful in-depth transformation depends on the embeddedness of initiatives in the broader social network of organisations experimenting and learning on in-depth lifestyle changes for sustainable agri-food systems. 2) the observed mismatches between the practices of local producers and those of large-scale retailers and fast food chains could be dealt with by moving back the sourcing and marketing of local goods, decision-making power to the level of the store, fostering so a higher degree of individual initiative and institutional entrepreneurship by store managers and employees in reconfiguring new practices .3) Overall, our analysis confirms that in order to increase the transformative potential of agri-food system initiatives, hybrid governance arrangements between different types of actors need to be established. They should aim at allowing more voice for marginalized interests upholding ethical values currently missing in the conventional supply chains, so as to foster the dissemination of a more systemic ethics of food system reform.

Keywords:

Sustainability transitions, agri-food systems, grassroots innovations, corporate social responsibility, niche-regime interaction.

2. INTRODUCTION

Together, the provision of agricultural inputs, and the production, packaging, processing, transport, and distribution of food, represent 19-29 % of greenhouse gas emissions worldwide (Vermeulen et al., 2012); and they exert an important pressure on natural resources, water, nitrogen and phosphate, and arable land in particular. Reforming food systems towards greater sustainability is therefore essential for a transition towards a low-carbon and resource-efficient society. Increasingly broad segments of society demand such a switch, and appear to search for alternatives.

In fact, as noted by the International Panel of Experts on Sustainable Food Systems (2018), Europe faces not only the global challenges of producing food for a growing world population and reducing the negative environmental impacts, but also other systematic challenges such as: (i) unhealthy food consumption behaviours that trigger health risks, (ii) additional health risks due to pollution created by agri-food sectors, (iii) small-scale farmers' livelihoods at risk due to multiple challenges (e.g. aging farmers, debts, low incomes, etc.); and (iv) poor working conditions due to price competition and power concentration. To tackle these challenges, in-depth reforms in the agri-food sector, from production to distribution are required.

Large for-profit corporations play a key role in this transition towards sustainability (Turker, 2018:170). However, for-profit actors willing to actively participate in the transition towards sustainability are confronted with conflicting objectives: i) to maximize profitability, ii) to minimize environmental impact, and iii) to enhance the social wellbeing (Hassini, Surti and Searcy, 2012:71). Focusing on these conflicting objectives Paulraj et al. (2015:2) question why profit-oriented organizations would move towards social and environmental sustainability within the supply chain. The authors highlighted the scarcity of win-win situations, where companies achieved a profit-maximization (economic win) while minimizing their environmental impact (environmental win). Indeed, from a Resource Based View (RBV) perspective, 'going green' leads to higher production costs for a company. In particular, Lin et al. (2015:2196) highlight three types of resources needed for pro-environmental behaviours at a company level: (i) higher capital investments in equipment, machinery, and real state; (ii) higher material and services' costs from new suppliers; (iii) higher labour costs due to higher workers and managers' wages.

As an initial explanation of these conflicting objectives scholars conclude that stakeholders' pressure (Andersen and Skjoett-Larsen, 2009:77), increasing environmental legislation and standards (Soosay et al., 2014:74), as well as organizations and managers' values (Bansal and Rothe, 2000:731) might be playing a role in this transition process towards sustainability, even if 'going green' is contradictory with the profit-maximization objective. However, considering the slow pace of progress accomplished until today with these conventional measures, complementary pathways to accelerate the transition processes need to be explored. The first is the contribution of grassroots innovations led by citizens and social economy actors. The second pathway is based on the interactions between these grassroots innovations and the mainstream food system that may possibly create new opportunities for

radical transformation of the agri-food system. These pathways are at present understudied and their potential poorly understood. This research aimed to provide a systematic analysis of these pathways in the particular case of the agri-food system.

The understanding of the potential role of these actors in the agri-food sector in Belgium can contribute to the development of a transition model towards sustainability. In particular, from a practical perspective, and in the short-run, understanding these different pathways will allow policymakers to develop policies to accelerate the transition. This can further lead, in the medium-run, to a more accurate allocation of public resources and enhance social and ecological wellbeing of the community. Finally, in the long run, and from a global perspective, the research findings might potentially contribute to reducing the agri-food sector's environmental impacts through the cumulative contribution of all the economic actors involved. It may also contribute to the global transition towards sustainability by reducing the Ecological Footprint of a high-income country such as Belgium.

3. STATE OF THE ART AND OBJECTIVES

3.1 Introduction

The challenges mentioned above and the impacts of the various sustainability problems at various levels -- on public health and on the environment, on rural poverty in the developing world and on power imbalances in increasingly globalized food chains -- make the need for reform urgent. Yet, it is easy to see how the various components of the food systems have coevolved and have now become mutually supportive, resulting in a strong path dependency on past choices (De Schutter 2017). All actors of the food systems appear to be caught in a trap: consumers expect to have access to a wide range of cheap and convenient foods all year round, encouraging companies to invest in infrastructure and logistics that achieve economies of scale and lengthen food chains; governments support such efforts as a means to compensate for existing inequalities and the slow progress or stagnation of real wages within the middle class; and both the introduction of Pigovian taxes to ensure negative externalities of heavily processed foods are reflected in the price of food products and, more generally, the imposition of further constraints on supply chain actors (except as regards food safety rules), are perceived as politically contentious and possibly counter-productive. The result however is a focus on the short term; strong path dependency; and an inability for all actors (consumers, businesses and governments) to launch initiatives for change that could have system-wide ramifications. That is not to say that no attempts are being made to design and implement more sustainable food production and consumption patterns; but such attempts often remain at the "niche" level, without having a significant societal impact.

It seems therefore that we are caught in a vicious cycle: although the current system is deeply unsustainable, its various components have co-evolved and are mutually reinforcing, and they have come to form a coherent whole with a strong inbuilt inertia (figure 2.1).

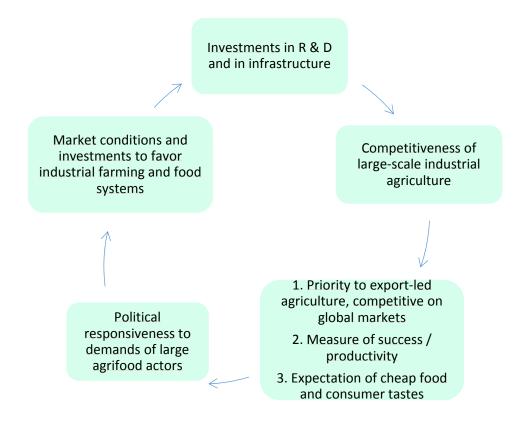


Figure 2.1 The mutually reinforcing components of the mainstream food system (adapted from De Schutter, 2017).

Neither politics nor critical consumerism alone seem capable of breaking the cycle. It is therefore tempting to turn to grassroots innovations -- "citizens-led", or "bottom-up" -- as an alternative pathway to reform. Each of these pathways to reform is discussed below, and their respective promises and limitations highlighted.

a) Political reform

Governments have an important role to play in aligning economic incentives with the requirements of sustainability, by the imposition of Pigovian taxes forcing the internalization of negative externalities. They could also support good practices, and reward the ecosystem services provided by sustainable agricultural production: attempts at valuing such services or, conversely, at "full cost-accounting" of the impacts of industrial food systems, prepare the ground for such interventions (TEEB, 2015). Governments could also tackle imbalances of power in food chains. Though lessons from past historical experiences are mixed, democratically-governed farmers' cooperatives could allow smaller-size farming units to have better access to certain public goods and to strengthen their bargaining position vis-à-vis both input suppliers and buyers -- establishing what J.K. Galbraith called a "countervailing power" (Galbraith, 1952) --. And they could use competition law to address the question of concentration or abuses of dominant position, including by prohibiting certain specific forms of abuse of buyer power (De Schutter, 2010).

However, the political economy reality of high-income countries provide little hope that these opportunities will be fully seized by governments : in addition to the capture of politics by the dominant actors of the mainstream food system, any serious attempt at reforming food systems that could lead to an increase in the price of food would meet with strong opposition, as cheap calories have until now functioned as a de facto substitute for redistributive social policies that would allow all families, including low-income families, to have access to healthy diets. As to competition policy, its use will be limited as long as "consumer welfare", narrowly defined as access at an affordable price to a large range of foods, shall remain the most important factor taken into consideration in using the legal tools available to public authorities (De Schutter, 2010).

b) Green capitalism

If solutions cannot be expected to come from governments alone, should we count on business actors to lead reforms towards sustainable food systems? There is no shortage of examples of regime actors, at different segments of the chain, advertising their commitment to more sustainable practices (Pattberg, 2012; Oosterveer and Spaargaren, 2012; Hajer et al., 2015). They know that the first movers will be rewarded by certain investors and, increasingly, clients. For corporations who wear a recognizable brand moreover, their reputation is a major asset that deserves protection. There are however two major limitations to what can be achieved through this channel.

First, to the extent that the emphasis is on voluntary initiatives by companies, acting on their own motion, the argument that such initiatives from dominant economic actors can bring about a transition to sustainable food systems relies largely on a "business case" for responsible business conduct. This is not entirely without foundation, considering the progress of socially responsible investment, of ethical consumerism and, increasingly, of shareholder activism. For instance, Hartmann (2011) reviews the results of four mathematical meta-analyses that tend to show a positive relationship between CSR practices and a company's financial performance. However, if that is indeed the argument, it may imply – or be understood to imply - that where it is not profitable to invest into sustainability policies, companies shall not do so: they may not go further in the implementation of such policies, in other terms, than what appears economically sound. Socially responsible conduct might come to be treated like an investment decision among others. As such, the potential for voluntary initiatives is inherently limited. As noted by the authors of the Responsible Competitiveness report published in December 2005 following two years of research on the relationship between responsible business behaviour and competitiveness, "individual businesses cannot go against the grain of the market. Being responsible sometimes does and sometimes does not pay. (...) While the growing significance of intangible assets has created opportunities for leveraging responsible business practices, the intensification of competition and the short-termism of investors constrain such practices" (Zadek et al., 2005).

The "business case" itself is, moreover, a fragile one. Any credible demonstration that there

exists a "business case" for socially responsible practice would need to carefully distinguish between the different initiatives which might be adopted by a company to improve the sustainability of its practices, and between the short-term and the longer-term impacts. Whether it takes the form of the imposition of transparency requirements on corporations, in order to allow socially responsible investors and active shareholders to exercise vigilance on their activities (Blumberg, 1973; Branson, 1976; Williams and Conley, 2005), the monitoring of labelling initiatives in order to avoid consumers being misled, or the enforcement of codes of conduct, public authorities have a major role to play to ensure that voluntary initiatives by the private sector shall make a real difference in practice -- something else, and something more, than an attempt at "greenwashing" the company's reputation. Without the hand of the State, "green capitalism", even though it may be fuelled to a certain extent by "critical consumerism", may not bring us very far.

c) Grassroots innovations

Because of these various limitations that public action and business initiatives (the latter combined with critical consumerism) face in their attempts to drive the transition to sustainable food systems, researchers have emphasized the potential of citizens-led social innovations. In the agri-food sector, such innovations include for instance community-supported agriculture (CSA), in which people contribute to support local farmers by entering into direct producer-to-consumer marketing schemes, although they might have access to the very same products by less expensive and more convenient means; the joint management, by members of the same neighborhood, of collective vegetable gardens; or fair trade schemes (Hinrichs, 2014). Depending on the theoretical framework used, these innovations are referred to as social innovations for sustainable development (Seyfang and Smith, 2007; Kirwan et al., 2013), or (in the so-called "multi-level perspective" on transition theory) as "niche innovations", that must be nurtured and protected in order to provide alternatives to the mainstream regime (Geels, 2011; Spaargaren et al., 2012a).

What is the potential of these grassroots innovations for food systems reform? One possibility is that the grassroots innovation simply coexists with the mainstream regime, not temporarily but for a long period of time, thus **creating a form of "diversity within the food system"**. On the one hand, this may create the risk of providing the government with a convenient pretext for delaying action to improve the sustainability of food systems: why, after all, should it intervene, if discontented individuals set up their own solutions, and if neighbourhoods or broader communities develop alternatives that satisfy their desire for fresh and healthy foods, at the same time strengthening social links between the participants (McClintock, 2014)? On the other hand, however, such a diversity can be deeply subversive, obliging all actors in the food system to rethink their position, and to take responsibility for it: instead of escaping such responsibility in the name of the "system" being so inert and beyond any ability for any single actor to change, each individual henceforth shall have to face the reality of different ways to produce and to consume, all equally viable, so that his or her choice inescapably becomes political.

Beyond this coexistence scenario, transition theorists see **different ways citizens-led social innovations could interact with the mainstream and potentially transform it** (Geels & Schot, 2007). We may rank these possibilities from the more "reformist" to the more "revolutionary", and as Geels (2011) does, relate these various possibilities to different actors developing these innovations (as mapped in Dahle, 2007). The most reformist scenario is one in which the niche innovation is adopted by regime actors because it provides them with a convenient solution to existing problems, and then "subsequent adjustments [...] change the regime's basic architecture" (Geels, 2011: 32).

Putting aside the possibility of a crisis of a magnitude such that the mainstream food regime shall be wiped out entirely to be replaced by something else -- a "de-alignment and re-alignment" scenario that is neither the most realistic nor the most desirable, given the human costs likely to be involved until a new equilibrium is found --, we should both promote "diversity" and ensure that promising niche innovations that prepare the emergence of more sustainable food systems shall influence regime transformation.

3.2. Hypothesis

To analyse sustainability transitions within various modalities of transformation scenarios between citizen-led innovations and regime actors, this project adopted a transdisciplinary approach to the research process. Such approach links co-construction of research questions between social actors of food system reform on the one hand and academic perspectives informed by various theoretical models. These models were built within an interdisciplinary framework combining sociological work within actor-network theory (ANT) and the multi-level perspective (MLP) from transition studies, with scholarship in social and solidarity economy and intrinsic corporate social responsibility.

The transdisciplinary knowledge co-construction approach to transition process allows us to bring new insights, by better integrating the real-life world interpretations from situated actors in transition processes. In particular, what underlies actors' transition process is the transformation of intrinsic motivations, social values and worldviews. Consequently, the understanding of the transformation and the alignment of these motivations, values and views amongst the social actors is of crucial importance for producing the transformation knowledge for transition.

The general hypothesis of the research is that to be a driver for sustainability transitions, changes in actors' motivations, social values and visions need to be systemic. A first specific hypothesis is that transformations of motivations, values and visions should not only guide the strategies and activities of all actors of the sociotechnical system, but they should also relate to a systemic understanding of the problems, i.e. question the underlying assumptions on which the agro-industrial paradigm developed (such as the assumption of infinite resources, of prices effectively reflecting scarcity and responding to needs, of progress measured by yields of the dominant crop per surface, or of the need to increase production). Second, hybrid governance arrangements putting together incumbent actors and actors who are not stakeholders of the dominant food system favour the development of new values and visions and the emergence of such a systemic perspective. Therefore a second specific hypothesis of the research is that hybrid governance arrangements that include actors that convey different visions of the future of food systems and provide a different framing of its challenges are a key feature for initiatives not to contribute to further lock-in effects and for the involved actors to enter a transition process.

To explore the contribution of these two hypotheses to explaining sustainability transitions in the agri-food systems, this project organized a series of field inquiries with actors within the agri-food system in Belgium. The first set of field inquiries is related to the so-called alternative food networks, whose explicit aim is to build an alternative model to the agroindustrial system. The second set of field inquiries is related to market innovations and corporate social responsibility by mainstream actors of the food system.

4. METHODOLOGY

To test the fruitfulness of our perspective on understanding transitions through the lens of the coexistence and transformation pathways between grassroots innovations and regime actors, the project is organized in two main interrelated parts. The first part analyses the conditions of emergence and growth of grassroots innovations, and their contribution to radical innovations in the food system. The second part analyses the potential contribution of actors of the mainstream food regime.

Part I focuses on grassroots innovations by citizens and social economy actors that contribute to create sociodiversity in the food system. To analyse their contribution to sustainability transitions, part I conducted a social network analysis of alternative food networks. Its aim is to address the following questions:

- What are the conditions of emergence and growth, by upscaling or dissemination, of grassroots innovations?
- What is the role of "network bridging organisations" of various types, which have the ambition to create the necessary organisational mechanisms to foster social learning on the transition of the food system and support to the development of innovative practices?

Part II focuses on initiatives involving regime actors to analyse their possible contribution to sustainability transitions. This part examines the motivations for environmentally responsible behaviour of for-profit businesses and to which extent practices such as local sourcing in supermarkets can contribute to a sustainability transition. It aims to bring insights to two questions:

- Are interactions between regime actors (such as retail corporations) and niche actors (for instance local initiatives supplying big retailers with local products or NGOs) contributing to a deep transformation of the dominant food system, and if so, how?
- Is the introduction of more sustainable products in corporations' sourcing strategies an
 opportunity for a profound change (i.e. for sustainable farming and food practices,
 preservation of biodiversity, and for social and solidarity economy practices to scaleup) or does it rather reinforce the lock-in of the dominant system?

At the beginning of the project, the research questions were co-constructed through a multistakeholder workshop. For each of the thematic studies developed but also in Part 2, the following step-wise process was then organized:

- (1) Development of a theoretical model for the study of transition processes in the specific theme
- (2) Design and field testing of an interview guide based on the theoretical framework
- (3) Data gathering through face to face interviews
- (4) Analysis

The details of the method, for each of the thematic studies, are specified in the respective "methodology, data sources and field work" sections.

A final workshop was organised at the end of the project to present and discuss the results with all the stakeholders who contributed to the research (workshop participants, interviewees, members of the follow-up committee).

5. SCIENTIFIC RESULTS AND RECOMMENDATIONS

5.1 Part I. The contribution of alternative food networks

The involvement of citizens and consumers in sustainable local and regional food networks has emerged over the last decades as one of the tools for promoting civic learning on the change in production and consumption practices. The contribution of local food networks to bringing about a shift to more sustainable agri-food systems is, however, a matter of intense debate. Indeed, such initiatives may involve trade-offs between the various sustainability features. For instance, a large-scale study by scientific experts, regional stakeholders and practitioners of local food networks within five metropolitan areas in Europe shows that, whereas short and regional food chains generally perform better than the conventional global long food chains as regards environmental sustainability, this is not necessarily true for all types of short and regional food chains. Indeed, rather than rewarding producers with the most sustainable agronomic practices and thus providing benefits to the society as a whole, some short and regional food chains, in fact, respond to the preferences of individual consumers for "fresh and healthy" food linked to local food cultures (Foodmetres, 2014). The ecological footprint of food chains, moreover, may have to take into account also the distances travelled by individuals or families from their home to the place of sale: visiting a farm to buy products on the farm may have a high impact, higher than when families buy in the local supermarket or grocery. Similarly, alternative food networks may lead to the gradual emergence of a twotiered food system, in which the wealthiest households have access to high-quality and fresh foods, with only more heavily processed and low-quality food being affordable for poor families.

To disentangle these contrasted contributions to sustainability, this thematic research investigates a central player in the alternative food networks, which are the food buying groups, and the bridging networks that foster social learning amongst the social movements and the umbrella organisations of these food buying groups.

5.1.1 Research questions and theoretical model

The key hypothesis of this thematic research is that the activities of the food buying groups combine various aims, in varying proportions in each initiative, and that these distinct aims call for different modes of governance and kinds of support. The sample that is investigated includes both organisations that more actively promote the goals of changing the agri-food systems (through a social network component, oriented towards social transformation and empowerment on more sustainable farming systems) and organisations that have a more functional orientation, geared towards the provision of services (through a non-profit service component, oriented towards enlisting consumers and producers in more sustainable consumption patterns, providing support for software or contracts).

A set of research questions emerge once we take into account the hybrid nature (social network and social enterprise) of the organisations in the alternative food networks. However,

key issues in support of these aims, such as the mobilisation of resources for their functioning and the mechanisms to enlist and commit members have hardly been subject to a systematic empirical assessment. One notable exception is the study of hybrids between non-profits and social movements for peace and reconciliation in South Africa (Hasenfeld and Gidron, 2005, p. 105–107). In this case, researchers showed that members of hybrids typically gather around common social values, mobilise resources through accessing social networks and connecting with organisations that control important resources (including members, funds, legitimacy, and technical expertise), and build social capital by responding to the expressive and social identity needs of their members. The qualitative assessment of sustainable food chains in major EU city areas (Foodmeters, 2014) also highlighted the importance of these features, even though the "social capital" aspects appear to be less well analysed in some of the studies (for an exception, see Berehm and Eisenhauer, 2008).

To assess the role of the various tools and mechanisms mobilized in the social movement and the social enterprise components of the alternative food networks, two regression models were developed, based on the responses to the multiple choice options of a semi-structured questionnaire. The first regression model focuses on resource mobilisation and commitment, while the second model focuses on direct and indirect policy support.

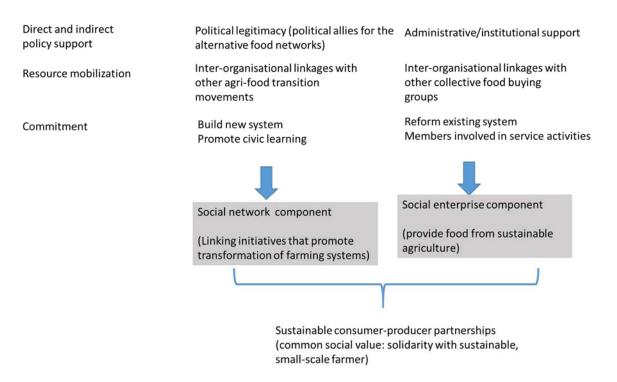


Figure 5.1.1 Food buying groups as a hybrid social enterprise/social network organisational form.

5.1.2 Methodology, data sources and field work

We conducted field interviews between December 2014 and July 2015 across 104 food buying groups in the three Belgian regions. The sample was built to have a broad diversity of food geographies, including 3 large urban areas, 2 small-size urban areas and 2 non-urban areas. Because we aimed to identify the potential network effects, a number of food buying groups

within a radius of 30 km were chosen in each area. Further, as illustrated in Table 2, the survey covered a broad variety of organisational types representative of the main categories of local and sustainable producer-consumer partnerships. The questionnaire checked for the viability of the organisations: all the organisations surveyed had developed an economically stable partnership with the producer, and all showed a stable or growing membership (the main reason for leaving the group is that people move out to another place).

During the interviews, a semi-structured questionnaire was administered, containing 3 open questions and 28 closed questions with predefined multiple-choice options. With the exception of 4 interviews with the "Ruches", and 4 interviews with the "GAC" (Groupements d'Achats en Commun), which were conducted by phone, all the interviews were done face to face, each lasting between 45 min and 2 hours.

Voedselteams (Leuven, Antwerp (both urban), and Limburg (non-	Key features System of weekly orders, strong umbrella organisation that provide support for software and identification of	Nu mbe r of inter view s 35	Total number of organisat ions in Belgium 175 (Oct. 2015)
urban)) GAC : Groupes d'achat commun (Brussels, Ottignies-Louvain-la- Neuve (both urban), Walloon Region (non-urban))	new producers (membership fee of 15 euros/year) System of weekly orders, loose federation	42	148 (including AMAP, Oct. 2015)
GASAP : Groupes d'achat solidaires de l'agriculture paysanne (Brussels (urban))	System of solidarity contract with the farmer (usually 1 year contract), strong umbrella organization, no membership fee	10	74 (June 2014)
CSA: Community-supported agriculture (Antwerp, Leuven (both urban))	System of solidarity contract with the farmer (usually 1 year contract), loose federation, members also contribute to harvesting	8	31 (Oct. 2015)
Ruches : La Ruche qui dit Oui (Brussels, Ottignies-Louvain-la- Neuve (both urban), Walloon Region (non-urban))	System of weekly orders, strong umbrella organisation structured as a social enterprise (Entreprise Solidaire d'Utilité Sociale), 8,35% of the price paid by the consumer goes to the umbrella organisation and another 8,35% to the person who created and manages the Ruche	7	53 (Oct. 2015)
AMAP : Association pour le maintien de l'agriculture paysanne (Ottignies-Louvain-la- Neuve (urban), Walloon Region (non-urban))	System of solidarity contract with the farmer (usually 1 year contract), loose federation, no membership fee	2	(included above)
TOTAL		104	481

Table 5.1.1 Organisational forms of the studied food buying groups

5.1.3 Results and discussion

The research highlighted two major challenges facing the operation of food buying groups. First, these organisations are dependent on mechanisms to increase the local and regional supply of sustainable farm products, by supporting farmers involved in low-input, agroecological or organic farming systems or by supporting the conversion of farmers to such systems. Secondly, these initiatives lack means to promote broader social learning on possible lifestyle changes for the transition to sustainable agri-food systems, although some seek to compensate for this by linking to other initiatives involved in social learning around such lifestyle changes through information sharing, knowledge exchange and common activities.

This research shows that organisational networks of food buying groups seek to address this twin challenge by a hybridisation of a social enterprise component, focused on service provision for the organisation of the sustainable food short chains (such as through mobilizing voluntary labour for collection and distribution), and a social network component, focused on the information sharing and joint activities. More specifically, the food buying groups with the highest number of activities related to in-depth transformation of the food system include members from within each component.

Two main results stand out. First, an important element of the social network component is the construction of social and ecological sustainability transitions as a *multi-dimensional* concept, which goes far beyond the "local market" or "fresh and healthy" dimensions only. This is especially important, as this multi-dimensional interpretation of sustainability has to compete for instance with a growing discourse of economic nationalism/regionalism that focuses on local economic production, without necessarily integrating the ecological and social dimensions. For instance, cheese from a local high input large-scale industrial provider can be promoted with a "regional" label, in spite of the fact that such local sourcing is not related to sustainable consumption and/or production methods. Moreover, to provide plausible alternative pathways AFNs need to strike the right balance between potentially these conflicting objectives.

The broader orientation of the food buying groups, beyond the discourse of economic nationalism/regionalism or satisfaction of individual consumer preferences, is confirmed by the survey results. In particular, the coordinators of the groups indicated that experimenting with sustainable lifestyle changes is one of the most important objectives of the organization (question 31), and they rank support to sustainable farming practices higher than the promotion of short circuits (question 29). This is also reflected in the composition of the food baskets, which often complement the local supply in sustainable farming products with organic products from a regional wholesaler if these are not otherwise available. In addition, the responses to the questions on the network relations clearly show the multi-dimensional nature of this process. Not only "local" or "healthy" food-related organizations, such as the small-scale farmer and the local groceries, rank high in the organizations with which the strongest

relationships are developed. Other organizations such as organizations promoting sustainable agriculture, fair trade or social organizations are mentioned as having a major influence. Further, in a substantial number of the groups that were interviewed, this social networking extended to explicit linkage to broader clusters of social and ecological initiatives, in particular with the members of the transition movement (formerly transition towns).

Second, the groups largely favour decentralized modes of coordination for organizing the social network component, as compared to more centralized modes of coordination. These decentralized networks play a role in the information sharing and cooperation around activities of alternative food networks, but also in the dissemination and exchange of information on organizational tools to set up and develop food buying groups. As regards the social learning networks around lifestyle changes, centralized network connections with national or regional authorities rank very low in the questions of the survey related to trust and influence. In contrast, decentralized networks, such as networking with nearby food buying groups, local groceries and other food transition associations all rank very high in the declared relationships of trust and influence. In relation to the dissemination of the organisational tools, legal and organisational advice from peers is preferred to expert advice or advice from public administrations.

5.1.4 Recommendations from the thematic research

These insights on the multi-dimensional understanding of the transition to sustainable agrifood systems, and the role of decentralized networking in fostering collective learning hint to some governance recommendations for the operation of grassroots innovations in the alternative food networks. First, the choice of an organisational structure is not a sufficient condition for a fruitful combination of the social enterprise and the social network components. As shown by the questionnaire results, the choice of a social cooperative organisation of the type "community supported agriculture" (CSA) is not a guarantee for a successful implementation of the social network component. Indeed, some organisations in the CSA subsample are stronger on the social networking than others. Conversely, the choice of a more commercially oriented social enterprise such as "La ruche qui dit Oui" does not preclude the possibility for successfully addressing the social network aspects geared towards an in-depth transformation of the food system. Rather than organisational form as such, the key feature for a successful contribution to in-depth transformation seems to be the ability to embed a given initiative in the local social network of organisations experimenting and learning on indepth lifestyle changes for sustainable agri-food systems. Such embedding can be the result of information sharing or the organisation of joint activities with other sustainable food-related organisations, such as local groceries and cooperatives, but can also be based to more integrated forms such as the participation in the activities of the established transition network in Belgium.

Finally, the governance requirements of the hybrid social network/social enterprise components of the food buying groups also indicate some questions for further research. In particular, scholars of non-state collective action have shown the important role of network

bridging organisations in collaborative social networks amongst private not-for-profit and public sector actors (Berkes, 2009; Dedeurwaerdere et al., 2015). Such network bridging organisations include regional platforms, umbrella organisations or knowledge hubs, among others. These organisations fulfil various roles that are key to the building of the cooperative action amongst the various social actors that drive the transition initiatives.

The results of our analysis (as summarized in Dedeurwaerdere et al. 2017) points to two important categories of tasks for such network bridging organisations in the case of alternative food networks. First, as can be seen from the survey, various governance means are specifically needed for developing the social enterprise service activities component. Many local and regional food networks still have to cope with inefficient distribution channels, lack of administrative support and poor infrastructure. Umbrella organisations, supported both by public authorities and members' fees, can step in to overcome some of these insufficiencies. For example, in one of the cases analysed in this research, the Voedselteams vzw (cf. table 5.1.1) is a strong umbrella organisation supporting the local groups in the search for suppliers located within their vicinity. This kind of support (helping to identify local producers) is strongly correlated in the survey with the trust expressed by the local groups in the umbrella organisation. In another prominent example abroad, the case of the Seikatsu Club in Japan, the umbrella organizes the transportation of these products from the producers to the food buying groups in the most efficient manner.

A second category of tasks for umbrella organisations that can be related to the outcomes of this research is the support for decentralized network activities related to social learning amongst grassroots initiatives and with other sustainable food organizations. In contrast to the more conventional supportive activities (such as exchange of best practices, administrative support or legal advice), this collaborative aspect is often less straightforward. Indeed, as also shown elsewhere, successful social learning in networks of non-state collective actors depends on "process" dimensions such as non-coercive deliberation and inclusive participation (Innes and Booher, 2003). An interesting example of a network bridging organisation operating along these lines is the "Endogenous Regional Development" programme supported by the regional authorities in Austria (Petrovics et al., 2010). This programme is explicitly geared towards supporting social enterprises for regional sustainability transitions, but it also includes an important aspect of regional and supra-regional dialogue between the initiatives. Another example is the role of the "Grand Projet Rhône-Alpes" in the Vallée de la Drôme in Southern France, where support for non-profit and for-profit enterprises involved in ecological transition activities was combined with a collaborative networking of all the actors in a specific territory (Lamine et al., 2014; De Schutter et al., 2016). In the case study area that was the focus of this thematic research, potential network organisations that operate along these lines are the "Ceinture alimen-terre Liégeoise" (www.catl.be) and the forum "Gent en Garde" (https://gentengarde.stad.gent). An interesting example of networking amongst non-profit and for-profit actors is the social enterprises hub Coopcity in the Brussels Region, which links food system reform initiatives with issues of overcoming urban poverty. However, further research is needed to document the effects of these organisations on the

development of the local food networks and to better understand the various governance and complex process management needs of the collaborative tools established in such largerscale social learning processes.

5.2 Part 2A. Analyzing the potential contribution of regime actors

Part 2 consists of three thematic studies that address the potential contribution of regime actors from the mainstream food system. The first thematic study aims to map the motivations of regime actors in the food system in Belgium that adopt a socially and environmentally responsible behaviour. The second and the third studies aim to analyse the potential contribution of innovative food networks involving regime actors. These three thematic studies appear particularly promising for three reasons. First, social innovations by regime actors can open up new marketing opportunities to sustainable small-scale food producers and processors. As such, these schemes could be a way to reverse the trend towards increased production concentration and the growing distance between food production and consumption which characterise the current agri-food system (Friedmann and McMichael 1989; IPES-Food 2017). Second, such hybrid schemes articulate the local with the global and as such they offer an opportunity to explore the transformative potential of going beyond the divide between conventional and alternative food chains to explore power imbalances and their broader effects on rural development (Sonnino and Marsden 2006). And third, "transition" is a polysemic term, which may aggregate many dimensions of agriculture and sustainable food system values. The thematic studies on innovative food networks involving regime actors hold strong potential of providing insights on the social construct of food related values, and on the way local governance arrangements may influence the sociotechnical trajectory the agri-food system is embarked upon.

Supermarkets, food processors and wholesale businesses are acknowledged to have a central role in the food supply chain and more broadly in the shaping of the global agri-food system. For instance, there is a broad literature on the impacts of private standards set by retailers on the export opportunities for producers from developing countries (e.g. Henson and Humphrey 2010; Swinnen and Vandemoortele 2011) as well as on the growing dependence of small-scale producers in developed countries (e.g. Richards et al. 2013). However, these regime actors have been generally neglected by transition studies. Analyses of lock-in effects have mainly focused on the production side and pesticide issue (e.g., Vanlogueren and Baret 2008; Lamine et al. 2010, building on seminal work by Cowan and Gunby 1996), overlooking not only consumers but also large-scale intermediaries and retailers. Some studies do indicate, however, that by imposing certain standards on the upstream part of the food chain (e.g. homogeneity standards, volume and uninterrupted supply requirements), corporate retailers exclude from their shelves a significant part of precisely the food products that are most sustainably produced, reducing the availability of such products for consumers. For example, the socio-historical analysis of fruit production in France by Lamine et al. (Lamine, Audergon, et al. 2014) shows how these standards can force farmers to make intensive use of chemical inputs.

In addition to marketing practices, abuse of buyer power also contributes to exclude some forms of sustainable food products from corporate retailers' shelves, by undermining social sustainability either directly or indirectly: pressure on prices contributes to further restructuring agri-food production from a large number of small producers to a small number of large producers (Konefal et al. 2005), whereas the further concentration of the power of oligopsonies reduces the number of alternative food outlets able to market products of small-scale farmers (McCullough et al. 2010).

The corporate retailers' increasing market power led to the emergence of a retailer-led governance of the agri-food system in the 1990s: retailers took over not only market governance, but also gained influence on food regulatory systems, including at the EU level (Marsden et al. 2000). Retailers' strategies to develop private standards and improve food products to take into account concerns expressed by increasingly aware consumers further led the governance to be privatized. Retailers shifted backstage, out of reach of social movements and agricultural-environmental advocacy organisations (Konefal et al. 2005), as well as medium- and small-scale operators (Busch 2003).

Considering the central role corporate supermarkets, food processors and wholesale businesses play in maintaining (or removing) the lock-in in unsustainable food systems, rebalancing relationships among actors appears crucial. As mentioned above, some scholars believe social movements are best equipped to put pressure on or collaborate with incumbent actors to achieve this rebalancing in the agri-food system (e.g., Buttel 1997; Konefal et al. 2005; Friedmann and Mcnair 2008), while others argue that this should be a responsibility of states (e.g., Buttel 1997; De Schutter 2009). This research explores an alternative possibility and considers innovative food networks which hold potential for an underestimated and potentially powerful mechanism to achieve the rebalancing.

5.3 Part 2B. For profit economic actors' pro-environmental drivers

For-profit organizations (from now onwards refer to as "companies"), as active participants of the food system, may contribute to the transition towards sustainability and the achievement of a sustainable production and consumption agri-food system. In fact, some companies of the agri-food sector have introduced changes in their businesses to take into consideration social and ecological sustainability. However, the weight afforded to sustainability concerns varies among them (Turker, 2018:161). This leads to a heterogeneous composition of the agri-food sector, with green-oriented and non-green-oriented companies coexisting.

Thus, the aim of this first thematic research of part 2 is to contribute to the understanding of the agri-food sector companies' drivers towards sustainability. In other words, this research would like to address the following question: what drives companies in the agri-food sector to "go green"? Subsequent research questions are: i) Do pro-environmental drivers vary among companies of different size?; ii) Do pro-environmental drivers vary among companies of different maturity?; iii) Do pro-environmental drivers relate to the companies' internal/external pro-environmental motivations? To answer these questions this section focuses on a case study of Belgian agri-food companies.

Pro-environmental drivers have been widely researched and discussed in the past, but not in the agri-food sector. Furthermore, most of the pro-environmental studies have been conducted for large companies, while Small Medium Enterprises' (SMEs) motivations remain unexplored (Sandhu et al., 2014). Thus, the agri-food companies' (including SMEs) pro-environmental drivers, as well as the influence of various explanatory variables such as size, maturity, internal/external motivations, and external support mediate their pro-environmental drivers constitute an interesting knowledge gap.

5.3.1 Research questions and theoretical model

Mazurkiewicz (2004:2) defines 'Environmental Corporate Social Responsibility' as "the duty to cover the environmental implications of the company's operations, products and facilities; eliminate waste and emissions; maximize the efficiency and productivity of its resources; and minimize practices that might adversely affect the enjoyment of the country's resources by future generations". The wide and rich implications of this construct led to an extensive discussion on the construct's composite dimensions (Rahman and Post, 2011). Indeed, some authors argue the existence of up to 5 (five) or 7 (seven) environmental responsiveness' dimensions (Ilinitch, 1998; Jose and Lee, 2007; Clarkson et al., 2008). After a careful literature review, in combination with primary data collection and analysis, Bansal and Roth (2000) concluded on three main drivers towards Corporate Ecological Responsiveness (CER): i) market competitiveness, ii) conformity to social norms and legislation, and iii) social responsibility (Table 5.3.1). This model was judged to provide the most relevant framework for analysis for the purpose of the current research because: (i) other frameworks are limited to large companies that have the required data available (Rahman and Post, 2012) while SMEs are not considered, and because (ii) different from Mazurkiewicz (2004) that based the

definition on the organization's environmental responsiveness in terms of "duty", Bansal and Roth's (2000) definition focuses on the companies' initiatives to measure their proenvironmental drivers.

 Table 5.3.1: Corporate Ecological Responsiveness Construct (adapted from Bansal and Roth 2000)

	Dimensions of ecological re	esponsiveness			
	Competitiveness	Conformity	Social responsibility		
Definition	"() the potential for ecological responsiveness	"() the desire of a firm to improve the	"() a motivation that stems from the		
	to improve long-term	appropriateness of its	concern that a firm has		
	profitability." (Bansal and	actions within an	for its social		
	Roth, 2000:724)	established set of	obligations and values"		
		regulations, norms,	(Bansal and Roth,		
		values or beliefs" (Bansal	2000:728)		
		and Roth, 2000:726)			
Initiatives/	1. Energy and waste	7. Legislation	13. Redevelopmen		
Indicators	management	compliance	t of local community		
	2. Resources reduction	8. Creation of	areas to greenfield		
	3. Ecolabelling	environmental	sites		
	4. Green Marketing	committee or	14. Provision of a		
	5. Eco products	environmental	less profitable		
	6. Adoption of EMS	manager	green product line		
		9. Network with local	15. Donation to		
		community	environment		
		representations	interest groups and		
		10. Implementation of environmental Audits	local community		
		11. Establishment of	groups 16. Use of recycled		
		an emergency	paper		
		response system	17. Replacement		
		12. Aligned the firm's	of retail items or		
		image with	office product with		
		environmental	more ecologically		
		advocates	benign items		
			18. Recycling of		
			office wastes		

(Continued)

Anticipated	Higher profits	Long term sustainability	Feel-good factors
benefits	 Process intensification 	Survival	Employee morale
	Larger market share	License to operate	 Individual satisfaction
	Lower costs	Avoiding fines and	
	Differentiation	penalties	
	Higher share price	 Lessening risks 	
	 Rent-earning resources and capabilities 	Employee satisfaction	
Ends	Profitability	Firm survival	Corporate morale
Means	Competitive advantage	Compliance with norms	Social good
		and regulations	
Constituent	Customers, investors	Government, local	Society
focus		community, stakeholders	
Decision	Cost-benefit analysis	 Costs and risk of 	 Ecological values
analysis		noncompliance	
Decision rule	Maximize	Satisfice	Idealize
Strategic	Innovative	 Isomorphic/imitative 	Independent
procedure			

To explore what characteristics of the company impact on environmental responsiveness, three general features that have been identified in the literature are examined. First the companies' environmental management with an evolutionary perspective using age as a proxy to companies' maturity, second companies' size using companies' headcounts as a proxy, and third the companies' pro-environmental motivations distinguishing between internal and external motivations.

a) Environmental Management and Maturity

Environmental Management "involves the study of all technical and organizational activities aimed at reducing the environmental impact caused by a company's business operations" (Crammer, 1998 in Ormazabal and Sarriegi, 2014:74). Ormanzabal and Puga-Leal (2016) argue that companies' pro-environmental drivers might be based on what they have achieved in the path. In other words, their maturity stages might determine their pro-environmental approach and drivers might change depending on the companies' environmental maturity. In this vein, several scholars (Ormanzabal and Puga-Leal, 2016; Inoue, Arimura, and Nakano, 2013) find a positive and significant relationship between maturity and investment in environmental research and development. Jabbour et al. (2014) also find a positive and significant relationship between companies' environmental management maturity and the adoption of green chain supply management. However, no studies assessed it for the specific case of the agri-food sector. This specificity is critical because, as previously argued, pro-environmental drivers seem to be sector specific (Jabbour, 2010).

Interestingly Ormazabal et al.'s (2015) environmental management model has common elements with the CER construct developed by Bansal and Roth (2000). The early stages of the model ('Legislation fulfillment' and 'Responsibility assignment and Training') are related with the 'Conformity Driver of Bansal and Roth's construct, the middle stages ('Systematization' and 'ECO2') are related with the 'Social Responsibility driver" of the construct and finally the later stages ('Eco-Innovations' and 'Leading Green Company') are related with the Competitiveness driver of the CER construct (see Table 3). We hypothesizes, using age as a proxy to maturity, that mature companies will be more motivated than young companies considering the cumulative process argue by Ormanzabal and Puga-Leal (2016)

b) Size

The moderating effect of companies' size on corporate environmental responsiveness is highly contested in the literature (Elsayed, 2006), with two distinctive positions. The first group of scholars concludes that large companies are (i) more visible; hence they are highly exposed to stakeholders (González-Benito and González-Benito, 2006); government and customers' pressure (Henriques and Sadorsky, 1996). They also (ii) benefit from economies of scale and after introducing pro-environmental plans, initiatives, and/or production lines (Robinson, 2013). Therefore, they are more likely to have a 'green approach' to their production and operations (Zee et al., 2011). In contrast, the second group of scholars argues that small companies also have (i) high visibility (Chen and Hambrick, 1995) and are exposed to social pressure, at least at a local level. Mainly because they not only offer services locally but also create jobs at a local level. This allows them to develop a strong social capital (Perrini, 2006) and to be highly visible locally (Bowen, 2002). Additionally, small companies (ii) are more flexible (Bowen, 2002; Jenkins, 2009; von Høivik & Shankar, 2011), so they can introduce the required pro-environmental adjustments both faster and at a lower organisational cost (Aragón-Correa et al., 2008, Dean, Brown, and Bamford, 1998; Larson, 2000). Small companies, ultimately, (iii) are more likely to establish a 'green culture' (Schick et al., 2002) with a higher 'green awareness' (Zee et al., 2009).

Our literature review leads us to hypothesize that both small and large companies might report high levels of competitiveness, conformity and social responsibility, but the underlying reasons might vary among them. For middle size companies, the effect of size on their drivers is not that clear. They do not necessarily have available resources nor are highly visible.

c) Motivations

According to Bansal and Roth's (2000) results, companies in their sample intensively used the word 'compliance' linked to the 'conformity' driver. The authors understand these behaviours as reactive initiatives to external motivations, usually concentrating on the demands of the stakeholder (the community, their customers and the government) with the greatest influence.

On the contrary, the same scholars found that the 'social responsibility' driver clearly differentiates from the 'conformity' driver. The 'social responsibility' driver was rather ethical and can then be considered as a companies' internal motivation. In fact, it is argue that it came either from the organizations' or the managers' values. In other words, different from the 'conformity' driver, initiatives associated with the social responsibility driver were independent and creative.

In this scenario, we hypothesize that there is a positive relationship between companies' conformity driver and external motivation, as well as between companies' social responsibility driver and internal motivation.

5.3.2 Methodology, data sources and field work

Data for this research was collected through a nation-wide online survey distributed in three languages (French, Dutch and English) to more than 1,737 companies of the Belgian agrifood sector. In total 365 companies responded to the survey leading to a 21.01% response rate. The latter is consistent with other survey-like researches in the topic (Darnall et al., 2009; Ormazabal and Puga-Leal, 2016). Nevertheless, only surveys that were 100% completed were kept, leaving a sample of 205 companies (11.8%), also consistent with complete answers response rates in previous researches (Ormazabal and Sarriegi, 2014, Ormazabal et al., 2016; Navrocka and Parker, 2009). From the complete 205 surveys, 4 (four) of the respondents reported not to have an overview of the company (screening question). Thus, these surveys were removed from the dataset and only the remaining 201 surveys were kept. In some, the final sample included only responses from experienced and well-positioned respondents.

The units of analysis (the companies) contained a predominant representation of micro and small companies. The majority had a limited company (*Société Anonyme*/Naamloze vennootschap) legal status, and had 16 to 50 years of existence. Most of the companies reported not receiving external support for pro-environmental activities. Thus, most of them develop their pro-environmental actions with their own resources.

The structured cross-sectional survey had 23 questions, was conducted online, and it included the following sections:

- (Section A) socio-demographic information of the respondent,
- (Section B) sectorial activity of the company,
- (Section C) environmental responsiveness,
- (Section D) motivations towards pro-environmental behaviours,
- (Section E) external support for pro-environmental behaviours in the present and future considerations,
- (Section F) use and sourcing of biomass,
- (Section G) questions about the organization.

Section C included indicators of the three dimensions of corporate environmental responsiveness (cf. table 5.3.1) as statements and respondents were asked to give an answer

using a five (5) points Likert Scale (ranging from "(1) Disagree" to "(5) Agree"). The indicators were developed based on Bansal and Roth's analysis (2000) (see Table 5.3.1). To avoid the influence that the statements' order could have on participants, options were randomly assigned in each survey (Visser et al. 2000).

Potential limitations of the results obtained are the biases that might have occurred throughout the process. To avoid selection bias while creating our database we used three different information sources, with a random selection procedure to select companies in each of these sources: Food.be, Europages, and "importing agri-food companies in Belgium" (provided by Ad Hoc Data). We did not incorporate other sources because during the introduction of the third source we reached the point of saturation (companies repeated). Duplications were removed accordingly. The emails and addresses were crosschecked using other sources (companies' website and online search). To select the companies that received a paper invitation letter a systematic sampling strategy was implemented for the first round of distribution of the survey.

Social desirability bias might have also occurred due to social pressure towards proenvironmental behaviours. To overcome this bias, the anonymity of the replies was emphasized during all the communication with the companies (phone calls, emails, letters, as well as the survey introduction). We believe that our anonymity strategy to overcome this bias was successful. Indeed, 37.24% of the respondents disagree or partially disagree with the Corporate Ecological Responsiveness (CER) statements. Additionally, Arimura, Hibiki and Katayama (2008:293), show that the direction of the bias is unpredictable; it can be positive or negative.

This anonymity, on the other hand, prevented the researchers from cross-checking the results obtained with other information sources such as companies' report or websites. This crosscheck was considered relevant due to the self-assessment condition. Nevertheless, the guarantee of anonymity was deemed more relevant for the research to overcome the social desirability bias previously explained.

Another potential bias that might have occurred during the sampling is a self-selection bias. Thus, the willingness to participate might have varied among companies: companies' willingness to respond might have been higher in companies with stronger environmental interest. We believe, however, that our sample has a good representation of non-motivated companies as well. In fact, 34.10% of the sample indicated that they are not pro-environmentally motivated (whether internally or externally).

5.3.3 Results and discussion

a) Descriptive statistics

The majority of the sample (42.79%) is composed of micro-level companies with less than 10 employees, followed by small companies with 10 to 49 employees (36.32%). Medium-size (50 to 249 employees, 11.94%) and large (more than 250 employees, 8.95%) companies represent a smaller share of the total sample (Figure 5.3.1).

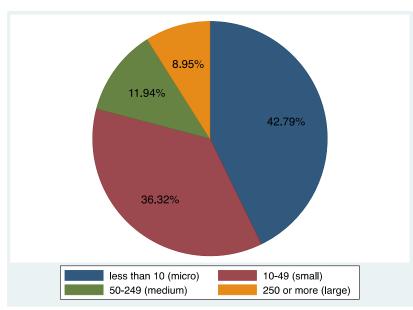


Figure 5.3.1 Sample per organization's size

The legal statuses of the companies informed by the respondents in the sample are mainly Limited Companies (58.21%), Limited Liability companies (19.40%), and Personal Business (18.91%) (Figure 5.3.2).

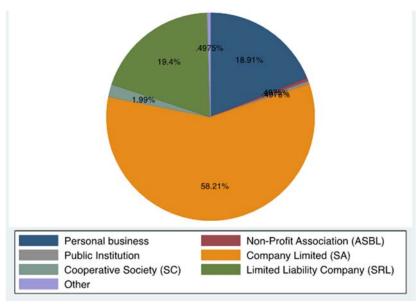


Figure 5.3.2: Sample per organization's legal structure

In terms of maturity, measured through the age of the company as a proxy, almost half the sample are mature companies (between 16 to 50 years old, 47.76%) (Figure 5.3.3). The remaining half of the sample distributes between young companies (0 to 15 years old companies, 22.39%) and classical companies (more than 50 years old companies, 29.85%).

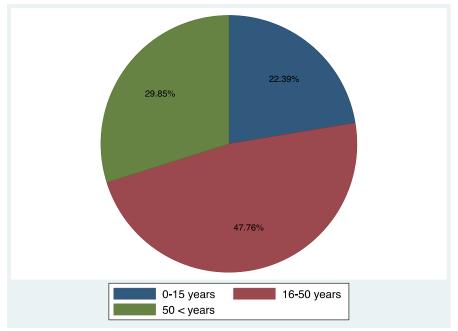


Figure 5.3.3: Sample per organization's age

b) Pro-environmental drivers

Bansal and Roth (2000:733) conclude that companies were mainly motivated by conformity aspects, followed by competitiveness, and finally for social responsibility aspects. As can be seen in Figure 5.3.4, in our case the main driver is competitiveness, followed by conformity, and finally social responsibility. An initial conclusion for policymakers could be that, to incentivize the Belgian agri-food companies towards sustainability and pro-environmental considerations, conformity plays an important role and should be highly considered like in Bansal and Roth (2000). Nevertheless, competitiveness has also a relevant role that should be kept in consideration. A potential explanation for the predominant role of competitiveness could be a demand-pull effect. This is, companies in the Belgian agri-food sector might be developing pro-environmental actions to increase their market share in response to an increasingly eco-friendly demand. This argument requires further research. The third driver in our case, social responsibility, also plays a quite relevant role. Bansal and Roth (2000) associated this driver with the values of the organizations or the values of the managers. As will be shown in the following paragraphs, the positive relationship between internal proenvironmental motivations and the social responsibility driver was found in our case study, supporting the authors' findings.

Social Resp. Aver. Indic						
Competitiveness Aver Indic.	•	•		-		
Legitimacy Aver. Indic						
	0%	20%	40%	60%	80%	1009
	-	timacy . Indic.	Competi Aver.		Social Aver. I	-
Disagree		2,44	6,47		3,48	
Partially Disagree	26	6,37	17,41		25,37	
Neither agree/Nor Disagree	35,32		43,78		47,76	
Partially Agree	23,38		27,86		19,4	
■Agree	2	,49	4,48		3,98	

Figure 5.3.4: Level of agreement per driver

c) The role of maturity on the pro-environmental drivers

The level of agreement with the different pro-environmental drivers (conformity, competitiveness and social responsibility) varies among the companies in our sample. First, for the social/legal conformity dimension older companies agree more than younger companies, as predicted (Figure 5.3.5). Second, and contrary to the conformity driver results, the competitiveness driver (i.e., the importance companies attach to environmental responsiveness as a source of competitive advantage) shows a reverse pattern. In fact, younger companies' level of agreement with the competitiveness indicators exceeds the rest of the companies (Figure 5.3.6). Potential explanations to these results are that younger companies were established after the rise of environmental awareness era in the 1990s. Thus, they might have, in a greater proportion, a 'green culture' that is part of their core business. Additionally, most of the younger companies are small companies (71.11% have less than 10 headcounts), thus the explanations related to size (see next subsection) are also valid in this particular case. Third, the role of age on the social responsibility driver is not clear.

		-	I	I	Likert s	scale	I	I
	50 <							
Age	16-50 years							
	0-15 years							
	(0%	20%	40%	60%	6 8	0%	100%
					Age			
		0-15 years		1	6-50 years	6	50 <	
Disag	ree		11,11		14,58		10	
Partia	lly Disagree		35,56		22,92		25	
Neither agree/Nor Disagree		35,56			36,46		33,33	
Partially Agree		13,33			23,96		30	
Agree			4,44		2,08		1,67	

Figure 5.3.5: Level of agreement to the conformity indicators by companies' age

		-	I	I	Likert scal	e	I		
	50 <								
Age	16-50 years								
	0-15 years								
		0%	20%	40%	60%	80%	100%		
			Age						
		0-15 years		16-	-50 years	50	50 <		
Disag	ree		8,89		6,25		5		
Partia	ally Disagree		17,78		18,75	1	15		
Neither agree/Nor Disagree			28,89		44,79		53,33		
Partially Agree		37,78			27,08		,67		
Agree		6,67			3,12		5		



d) The role of size on the pro-environmental drivers

Based on the literature review we hypothesized that small and large companies will report high levels of agreement with the three pro-environmental drivers: conformity, competitiveness, and social responsibility. Nevertheless, the results vary from one driver to the other and are analyzed individually.

For the conformity driver, only large companies reported high levels of agreement (Figure 5.3.7), partially supporting our hypothesis that argue that large and small companies will report high levels of agreement. Potential explanations could be that larger companies' resource

endowments are higher to implement pro-environmental initiatives (Udayasankar, 2008) making the relative cost of compliance smaller. Hence, complying with the regulations is relatively less expensive than for smaller companies.

For the competitiveness driver, the predictions extracted from the literature review were observed in the case study: large and small companies reported higher levels of agreement (Figure 5.3.8). In the case of large companies the high level of agreement with the competitiveness driver could be explained by the economies of scale (Robinson, 2013:51) once the green-production is introduced and because they can reach a larger share of the market (González-Benito and González-Benito, 2006). In the case of small companies, the high level of agreement with the competitiveness drivers (in comparison with middle-size companies – see later in this paragraph) might be associated with their 'green culture' (Schick et al., 2001) and awareness (Zee et al., 2011). This baseline might be leading them to be creative in their product development and market share competition. Thus, small companies, in the need to differentiate themselves from the competitors, since they cannot compete with economies of scale, benefit from the 'going green' attitude (Clemens, 2009:495) with green products to serve an experienced demand. On the contrary, medium size companies cannot access these economies of scale in introducing pro-environmental plans, initiatives, and/or production lines like large companies, neither have they the flexibility that small companies have to adapt and innovate in the competition for a larger share of the market.

Similarly to the competitiveness driver, the social responsibility driver commanded more agreement for large and small companies, as predicted by the literature. As in the previous driver, the potential explanations for this behaviour vary according to their size (Figure 5.3.8). However, in both cases, a main explanatory factor is high visibility. In the case of large companies, they are exposed to external pressure, not only from stakeholders (González-Benito and González-Benito, 2006) but also from the government (Henriques and Sadorsky, 1996). In the case of small companies, their visibility is local (Bowen, 2002; Chen and Hambrick, 1995) due to their multi-local engagement, in terms of job creation and local demand dependence.

		_	1	1	Li	ikert scale	I	I	
ize	250 <								
Headcounts - Size	50 to 249								
qcoui	10 to 29								
Неа	< 10								
	(0%	20%	400	6	60%	80%	100	%
		Headcounts - Size							
		<	: 10	10 to	29	50 to 24	.9	250 <	
Disag	ee	1	7,44	10,9	6	8,33		0	
Partia	lly Disagree	2	9,07	31,5	1	12,5		11,11	
Neither agree/Nor Disagree		36,05		35,62		45,83		16,67	
Partially Agree		1	5,12	20,5	20,55		,	66,67	
Agree	Agree		.,33	1,37	7	4,17		5,56	
							·		

Figure 5.3.7: Level of agreement to the conformity indicators by organizations' size

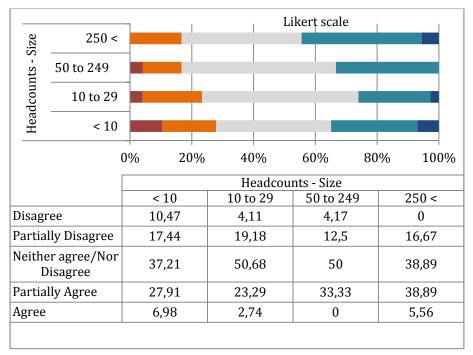


Figure 5.3.8: Level of agreement to the competitiveness indicators by organizations' size

		-		Liker	t scale	I	I
Size	250 <		1				
1	50 to 249						
Headcounts	10 to 29						
Head	< 10						
	(0% 2	0%	40%	60%	80%	100%
		Headcounts - Size					
-		< 10		10 to 29	50 to 249)	250 <
Disagree	4,65		4,11	0		0	
Partially Disagr	24,42		26,03	33,33		16,67	
Neither agree/I	46,51		49,32	50		44,44	
Partially Agree	22,09		17,81	12,5		22,22	
Agree	2,33		2,74	4,17		16,67	

Figure 5.3.9: Level of agreement to the Social Responsibility indicators by organizations' size

e) The role of internal and external motivations on pro-environmental drivers

Respondents were asked to indicate how their pro-environmental behaviours were motivated by three potential responses: (i) externally motivated, (ii) internally motivated, and (iii) not motivated. Based on the literature review, a high level of external pro-environmental motivations is positively associated the conformity driver, while a high level of internal proenvironmental motivations is positively associated with the social responsibility driver.

Figure 5.3.10 shows the level of agreement of respondents with social/legal conformity by level of external pro-environmental motivation. The relation between the two variables is not clear. There is no clear distinction between those companies that expressed to be highly externally motivated and those that reported low levels of external motivations. The reasons behind this lack of relationship, as predicted in the case of the conformity driver and external motivations, require further research. On the contrary, and as can be seen in Figure 5.3.11 the predicted positive relationship between internal motivation on social responsibility is clearly observed in the sample. Thus, the hypothesis was supported.

		-		Likert s	cale	
tios	81-100%					
tiva 1p)	61-80%					
External Motivatios (% group)	41-60%					
erna (%	21-40%					
Exto	0-20%					
	(0% 20	0% 409	% 60%	80%	100%
			External	Motivatios (% group)	
		0-20%	21-40%	41-60%	61-80%	81-100%
Disagree	e e	16,22	12,77	6,94	9,38	38,46
Partially Disagree		27,03	23,4	30,56	25	15,38
Neither agree/Nor Disagree		29,73	40,43	36,11	37,5	23,08
Partially Agree		18,92	21,28	25	25 28,12	
Agree		8,11	2,13	1,39	0	0

Figure 5.3.10: Effect of external motivations on conformity

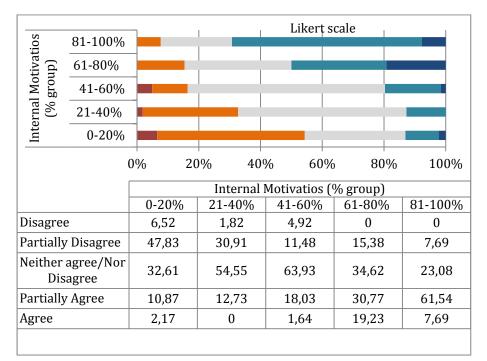


Figure 5.3.11: Effect of internal motivations on social responsibility

e) Comparison with results from the literature

This research aimed at understanding what drives the Belgian agri-food companies towards sustainability. In our case study, the main pro-environmental driver is competitiveness, followed by social/legal conformity, and finally social responsibility. The evidence obtained partially supports Bansal and Roth's (2000:733) findings (conformity been the main driver, followed by competitiveness and finally social responsibility) our initial hypothesis. These

scholars conclude that social/legal conformity is the main driver, instead of competitiveness, such is our case. Potential explanations for these differences between the literature review and the results obtained could be that ecological responsiveness is sector specific and that for the, nowadays, Belgian agri-food sector there is a stronger demand-pull effect driving the transition towards sustainability. The results also show that the drivers are complimentary and non-excludable. Thus policymakers should keep working on regulatory frameworks to accelerate the transition, while competition for a larger share of the market through pro-environmental actions and companies' social responsibility contribute to this process.

The analysis of mediating variables, in our case study, also offers rich insights from an academic and practical perspective. First, when maturity is considered, the evolutionary process proposed by Ormazabal et al. (2015) and Ormazabal and Sarriegi (2014) is reflected in the results obtained for the social/legal conformity dimension, while the competitiveness dimension reflects a reverse behaviour, and there is no clear relationship for the social responsibility driver. Second, evidence supports the expected relationship between size and the environmental responsiveness driver for large companies. In fact, the level of agreement was high for all the dimensions in the large organizations. Small organizations, in contrast, only reported a high level of agreements with the competitiveness and social responsibility driver, while for medium-size companies the level of agreement was lower for all the dimensions. Third, the expected positive relationship between external motivation and the conformity dimension is not clearly observed for the Belgian agri-food sector, while the positive relationship between internal motivations and the social responsibility driver are observed in our case study. This leads to a clear conclusion; internal motivation is key for the transition towards sustainability. Indeed, the positive relationship of internal motivation was found not only for the social responsibility driver but it is also true for the social/legal conformity and competitiveness drivers. These results will be further investigated in the next thematic studies, with a view to understanding how internal motivations can be incentivized to accelerate the transition towards sustainability.

We acknowledge that the lack of an effective and enforceable international companies' regulation in matters of biodiversity and climate makes it difficult to accelerate the transition towards sustainability. Moreover, large firms, in particular, those on the stock market, have a corporate structure that empowers investors, leaving managers with less manoeuvre space for pro-environmental actions. Nevertheless, the present study also touches upon an important and rarely studied element of sustainability transitions: alternative drivers towards a sustainable transition when the legal and ownership structure are immutable. Moreover, changes in legal and ownership structures do not happen entirely independently from companies' changes. In other words, companies' shifting towards sustainability can add pressure to accelerate the structural changes above mentioned.

5.3.4 Recommendations from the thematic research and considerations

The results presented in this report should be used wisely as they reflect the results from a case study, focusing on the agri-food sector of a developed region within the European Union:

Belgium. This consideration is crucial in terms of external motivations because the regulations in Europe are considered stronger than in developing countries (Mazurkiewicz, 2004:15). It is also important to acknowledge that the study was conducted for a specific sector (agri-food), and several authors have argued in favour of industry-specific studies, given their diversity. Hence, the results presented here cannot be generalized, and conclusions should be drawn carefully. The same reasoning applies to cultural and country-specific characteristics.

It should also be noticed that it is a cross-sectional study, thus the evolution in time of the proenvironmental drivers, and the evolution of the independent variables' effect cannot be observed due to the lack of baseline information. Nevertheless, given the exploratory approach of our research, this cross-sectional analysis offers rich insights on the drivers of the agri-food sector companies to go green and might well work as a base for future panel data research.

Another relevant observation is that causality is not concluded in this research. Even though the dependent and independent variables were considered, this research did not aim at testing causality among the variables.

The uniqueness of these results is found in the multi-pro-environmental-drivers consideration in the agri-food sector, which leads to interesting practical recommendations for policymakers. Based on the results obtained, for this particular case, competitiveness is a strong driving force, in comparison to conformity and social responsibility. Thus, to accelerate the transition towards sustainability policymakers should focus on incentivizing this driver, but without excluding the other drivers from the efforts towards sustainability. Thus a holistic approach is highly recommended. This also implies working on the companies' internal motivations, as will be seen below in the following thematic studies. These practical conclusions also open the floor for future research lines, to uncover if companies' internal motivations can be incentivized, and if so, what would be the path for this development with the caveats of stakeholders profit maximization pressure previously explained; why medium-size companies show a low level of agreement to all the pro-environmental drivers, and how this scenario can be changed. Finally, this work could well serve also as a baseline for a longitudinal study on the development of agri-food companies' pro-environmental drivers.

5.4 Part 2C. The creation of market innovations by regime actors: insights on ethics and governance of sustainability transitions

Does the involvement in environmental CSR induce effective contribution to agri-food transitions? A preliminary step to answer this question is a better understanding of the relationship between changing consumer demands for sustainable products and the various responses of corporate retailers (Marsden et al. 2000). Oosterveer et al. (2007) analysed the introduction of "green foods" (e.g. organics) in supermarkets and found that "a significant growth of the sustainable food market depends on the inclusion of such products in supermarkets. As the quality and quantity of sustainable products on offer increase and consumption is stimulated along with changes in lifestyle patterns, the dynamics of sustainable production may be strengthened, breaking away from the negative projections coming from the organic agriculture movement and opening up more alternatives for green-food production and consumption" (p. 426). This optimistic view fails to take into account, however, that retailers selectively appropriate consumers' demands (Friedmann 2005) and that they differentially construct quality definitions (Marsden et al. 2000): the market of sustainable food is not necessarily a sustainable food market. On the one hand, large-scale food retailers may develop a "strategic corporate social responsibility" model, where the inclusion of ethical or green products only further their strictly commercial interests (Orlitzky et al. 2011) and serve as a basis for competition as seen in the first thematic research (with the competitiveness dimension). On the other hand, these new sustainable products could signal the engagement of companies in environmental and/or social issues, as a testimony of an "intrinsic corporate social responsibility" policy where ethical products and their underlying values become part of the mission of the retailers (Arnold and Valentin 2013). In sum, upholding new sustainability values doesn't necessarily imply that activities are redesigned accordingly. Whether the introduction of sustainable products contribute to a transformation of the agri-food system towards more sustainability or whether it reinforces existing lock-in effects **remains, therefore, an open question**. To answer this question, we must open the "black box" of regime actors' appropriation of sustainable food values.

5.4.1 Research questions and theoretical model

To open the black box of regime actors' appropriation of sustainable food values, we adopt a pragmatist approach to social values, linking elements from actor-network theory (ANT) with an empirical, inductive use of the multi-level perspective (MLP) from transition studies. We use the concepts of enrolment and the focus on controversies from ANT as well as the holistic approach from the MLP, to analyse how the sociotechnical reconfigurations induced by three local initiatives in Belgium impact the agri-food system as a whole.

Each of the three case studies forms a subsystem that we analysed using a 'whole system' (Geels 2018), a pragmatist approach developed in previous work (Bui 2015, 2018). For each, we take into account all the actors involved (producers, processors, corporate retailers, independent outlets, public authorities, civil society organisations, consumers – cf. Figure

5.4.1). Consumers are indirect units of analysis as the evolution of their values and practices was only assessed based on data collected from the other actors and on grey literature.

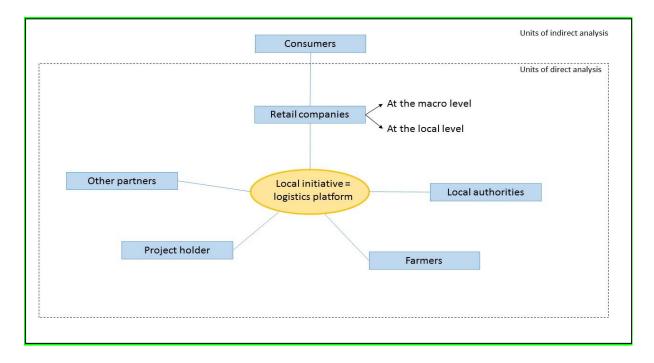


Figure 5.4.1- Mapping of the actors of each case study.

For each of these actors, we analyse: the sustainability values they claim to adhere to, how these values have emerged and how they evolve through interactions with other actors; the implementation (or absence) of related practices; their interactions with other actors, the coordination and governance features they participate in and their evolution since the early 2000's. We chose this time span because it allows having a historical perspective. Compared to the dynamics that are generally analysed in transition studies, this time span is very short – also in regard to analysing how values evolve. Fieldwork, however, confirmed that going further back in time wouldn't provide greater insight: a longer time frame would be desirable but is impeded by the fact that these initiatives only emerged recently.

5.4.2 Methodology, data sources and field work

We chose to focus on three initiatives that are now well established in Belgium, in order to have a longer historical perspective:

The province of Hainaut engaged in an informal partnership: the province contacts the producers and markets the local products in the stores - e.g. providing posters with the producers' pictures, names and addresses and organising promotional events where the producers themselves carry out tastings in supermarkets. The province also helps producers to calculate cost-prices so that they can define an appropriate selling price. In Hainaut in 2016, this project involved around 130 producers and generated a turnover exceeding 2.5 million euros for Carrefour.

- In Liège, the province decided to create a logistics platform via Promogest, one of its semi-public organisations. Promogest offers logistical solutions for producers and supermarkets, as it takes charge of deliveries, orders, invoicing, payments, and also marketing, going even beyond the efforts of the province of Hainaut by also making staff available for promotional events. It also searches for new producers and carries out a regular monitoring to address farmers' and supermarket stores' problems and conflicts. Promogest's board is composed of elected officials and large-scale, conventional farmers. In 2016, it worked with approximately 75 producers and its annual turnover reached two million euros.
- The third initiative we studied is located in the province of Walloon Brabant, and results from the alliance between that Province (after it was approached by Carrefour) and a Local Action Group (LAG). This Action Group had led for five years a box-scheme project and was looking for a way to upscale it and enhance its transformative potential: considering that one of its missions was to raise consumers' awareness, the LAG wanted to reach supermarkets' consumers and therefore create a logistical platform to supply stores throughout the province. Together the Province and the LAG decided to create a dedicated organisation to carry the platform. A civil society organisation (CSO) called Made in BW was created in 2015. Its board is composed of elected officials from the Province, small producers' representatives, and the LAG.

The research on these three cases studies is based on the qualitative analysis of semistructured interviews, field observations and complementary data from several documentary sources. We conducted 36 face to face interviews with the various actors involved in the initiatives as presented in Figure 5.4.1; realised six observations of workshops and discussion meetings in which the various actors interacted with one another; and gathered complementary data from several documentary sources (e.g. websites of the different actors interviewed; media articles; annual account of retailers, public authorities and civil society organisations; documents related to local sourcing and logistic platforms, such as internal strategy papers, minutes of internal communication and meetings, training programs).

5.4.3 Results and discussion

Impact of the 'local products' dynamics on practices in Belgian supermarkets

The collaboration between Carrefour, the two Provinces of Hainaut and Liège and local food producers resulted in several innovations: a specific contract and a charter which guarantees small producers fairer marketing practices, new logistical infrastructures and a new option for small producers to be included in the barcode system. This not only removed the marketing and logistic barriers small producers have traditionally been facing, but it also provided a basis for negotiations with other retailers, which gradually agreed to offer small producers similar marketing opportunities. Thus, these initiatives created the conditions for many local producers who were previously excluded from the dominant system to integrate it (more than

700 initiatives influenced the practices of the various actors. To assess the overall impact, however, requires putting them back in the context of first, the conventional supply chain and then, the socio-technical agri-food system.

The strongest impacts are on the production side and on the provinces' activities. Corporate retailers created a whole set of new sourcing and marketing practices to work with local producers, but these are totally disconnected from their mainstream sourcing chains. Carrefour producers across Belgium supplying Carrefour in 2016). As shown in Table 5.4.1, the three aim for local products is to reach 2% of its food sales, meaning that a niche market has been created; this, however, does not challenge the dominant system.

The impact of these initiatives on the practices of the various actors are very similar in Hainaut and Liège, the only difference being the setting up in Liège of a logistics platform. In contrast, a more profound impact can be noted in the case of the Walloon Brabant subsystem. In this local product initiative, not only new marketing opportunities for farmers and new logistic and promotion activities for the province have been created, but the market governance has also been impacted. Moreover, the core activities of the provincial extension services have unfolded in new directions; and new potentialities have been opened for consumption behaviours to evolve towards food citizenship.

	Imp	pact on practices				
Actors	Subsystems of Hainaut and Liège			Subsystem of Walloon Brabant		
Corporate retailers	L o w	Adapted marketing practices for a niche market (no impact on other practices)	Low	Adapted marketing practices for a niche market (no impact on other practices)		
Producers	H i g h	Increased revenue, jobs creation and continuation for many producers (over 200 producers in 2016); increased local sourcing	High	Participation of small producers in the food hub's governance; increased revenue, jobs creation and continuation for some producers (26 producers in 2016)		
Provinces	H i g h	New logistical and/or promotion activities	High	New promotion activities; participation in the food hub's governance; impact on other activities of the Province (e.g. new training program on short food chains and the reconnection of prod. & cons.)		

Table 5.4.1 – Impact on practices in the three subsystems: the practices of the various actors are impacted

Consumer s	L o w	consumption patterns for a po small share of total tia	ow, More local and seasonal consumption oten patterns for a small share of total purchases ally in supermarkets; development of new buying ghe patterns (e.g. consumers' cooperatives)
Local Action Group		Hi	igh Increasing commitment in agri-food issues; incubator for the food hub; participation in the food hub governance

This contrast can be explained by the governance arrangements the initiatives are related to. In Hainaut and Liège, the local product initiatives are implemented by already existing parapublic organisations whose board is composed of large-scale, mainstream farmers and representatives of the province. Small producers are only consulted once a year. Despite the creation of local food chains, there are no new interactions and the existing market governance is left intact.

In Walloon Brabant, the creation of a dedicated organisation allowed new interactions to take place among various actors of the agri-food system - small-scale producers previously involved in the box scheme, the LAG, and representatives of the province - upholding different sets of values. Their equal voicing in the board favoured the development of new ethical values, and this has had a significant impact on the practices of all the actors involved (e.g. fundamental change in the province's training program), and also favoured the construction of a hybrid project. Here, the purpose of working with supermarkets is not only to create new outlets for local producers, but also to reach viability for a logistic tool which also supports the development of alternative food networks, and thereby can foster the development of a local food system and of new, sustainable consumption patterns.

Radical innovations... contributing to the reproduction of the sociotechnical system

Marsden et al. (2000) showed that in the 1990s in the UK "retailers and the state have evolved working relationships which maintain public legitimacy and market power through a coming together of their interest in privately and publicly needing to demonstrate their mutual role in serving the 'consumer interest'". At the local level in Belgium in the 2010s, we witness symmetrical dynamics: a coming together of retailers and local authorities' interest in needing to demonstrate their mutual role in supporting local producers. For local authorities, this alliance represents a new way to perform an old mission: new activities are implemented to fulfil their support role, in line with what they have been doing since the 1990s. For corporate retailers, motivations are rather strategic than ethical. According to interviewees, Carrefour wished to build a more positive image in a context of increased competition and loss of market share; the fact that local food is managed as a niche market and that associated, innovative sourcing and marketing practices are separate from conventional supply chains suggests that this change is just an additional, benchmark of quality strategy. Other retailers are interested

only in a few products, such as honey and jam, which indicates local products are part of an even more classical benchmark of quality strategy.

The case of local sourcing by Belgian supermarkets is thus a clear illustration of the way capitalism feeds on criticism (Boltanski and Chiapello 1999). In the case of Carrefour's local product strategy, for instance, the various innovations have built on the organising principles of alternative food networks: trust, embeddedness and place (D. Goodman 2003). In-store tastings performed by the local producers and the posters with their pictures, names and addresses recreate the sense of community and trust generated through personal knowledge between producers and consumers traditionally attached to local food. This creates the impression that the local products are embedded both into a (fictitious) social network and place-based supply chains. Moreover, thanks to the messages conveyed by retailers, such as in the posters "Help us support local producers!" displayed by Carrefour in its supermarkets, customers can altogether satisfy functional, social and political needs that consumption may be aimed at satisfying (Brunori 2007). Hence, the local product schemes implemented by Belgian supermarkets have allowed the social and political grounding (Marsden et al. 2000) necessary to maintain the accumulation process in corporate retailing (Wrigley, 1996). From a sustainability transitions perspective, this dissemination model of local food geographies maintains the agri-food system on the same sociotechnical trajectory and favours a 'reproduction pathway' (Geels and Schot 2007).

This absorption of criticism is however partial. It can be argued that conventionalisation is not taking place, since critical features of alternative food networks, such as a better reward for producers and proximity, are preserved (Le Velly et al. 2016). Moreover, one could consider that those opportunities to have a choice are paving the way to new politics and outcomes of consumption (M. K. Goodman et al. 2010) and argue that beyond the low percentage of total purchases local food represents in supermarkets, the awareness-building dimension, and the impacts on diets and lifestyles may be significant, at least in the long run . As exposed in Section 1, our methodology does not allow us to provide insight on this topic, due to our analytical stance as well as the short historical perspective offered by our case studies. We may suppose that if corporate retailers were to stop proposing local food products, their customers would not desert supermarkets and radically reconfigure their purchase behaviour. Yet, these arguments certainly raise a major issue to explore in future research.

Another major issue raised by these arguments is that of the individuation of consumption, versus the need to collectively negotiate food ethics to rebalance of market power. This debate echoes the ecological modernisation versus relocalisation academic debate and highlights another way of assessing whether a conventionalisation process is at stake. Individuation of food consumption is an outcome of the modernisation of the agri-food system (Brunori 2007). As stressed by Marsden et al. (2000, 79) "retailers are committed, for their own survival, to promote the constant and dynamic individuation of 'the consumer' through innovating and providing new 'quality' choices". Considering that consumers' food choices are drivers for change and that those choices depend on what consumers know about food (Goodman and DuPuis 2002), the construction of the definition of 'local' is critical. Our three case studies

exemplify how the various possible meanings – and the related ethical values – of 'local' may or may not be negotiated, depending on the governance arrangements implemented during the unfolding of the initiatives. In the cases of Liège and Hainaut, governance is unchanged, shared among incumbent actors, and ethical issues of environmental and accessibility to quality food are set aside. The concern for social justice is present but restricted to paying fair prices to producers. In contrast in Walloon Brabant, shared governance of the food hub between incumbent and marginal actors allowed both dimensions of social justice to be put forward, which provoked a different unfolding of the initiative – and consequently gave it a much stronger transformative potential. As stressed by Brunori (2007, 6), "people behave according to the meanings they give to things, and it is the capacity to control how meanings are created that allows one person to affect another's behaviour". Extrapolating this quote to collective actors, to the sociotechnical system and to the issue of competing paradigms, makes it clear that rebalancing market power goes along with distributing the capacity to control how meanings are created.

5.4.4 Recommendations from the thematic research

What would be a "shared governance" fostering the transition towards sustainable agri-food systems then? Both sustainability transitions and alternative food networks scholars have extensively analysed how the coming together of various actors of the sociotechnical/agri-food system may allow the building of shared visions and shared interests. The importance of including non-agricultural actors in the network has also been stressed (Cardona 2012; Lamine, Navarrete, et al. 2014). What combining a values perspective with transition thinking highlights in this thematic research is that addressing the issue of sustainability of the agrifood system implies asking not only "sustainable according to whom?" as stressed by Smith and Stirling (2010), but also "sustainable for whom?". In particular, as can be seen in the Walloon Brabant case, the inclusion of new stakeholders upholding different sets of values is key to reaching a higher transformative potential, such as small-scale producers previously involved in the grassroots innovations, the Local Action Groups (under the EU Leader program), and representatives of the Province.

In terms of governance, the corollary is that fostering diversity in the agri-food system, which has been demonstrated to be the first step of a transition process (Bui, 2018), implies fostering the uptake of systemic ethics of food by incumbent actors. In addition, hybrid governance arrangements combining new transition actors with conventional supply chain actors favour such an uptake. A desirable shared governance should then involve not only various categories of agri-food and non-agricultural actors, through the participation of organisations representative of the dominant interests, but it should also and most of all aim at the voicing of excluded and marginalised interests, upholding ethical values that are currently missing in the conventional supply chains, so as to foster the dissemination of a more systemic ethics of food.

5.5 Part 2D. Transformation of social practices in niche-regime interactions

In this third thematic research of part 2, we aim to deepen the research on mainstream actors by taking a social practices approach to the way in which large-scale retailers source and market local products. Social practice theories refer to a family of theories that see (social) worlds and social orders as established and re-made through materially mediated 'doings' and 'sayings' (practices) (Carlile et al., 2013; Nicolini, 2017; Schatzki, 2012; Welch & Warde, 2015). Hence, phenomena such as markets, organisations and societies can be analyzed as resulting from repeatedly enacted practices over time and space (Orlikowski, 2010; Nicolini & Monteiro, 2017; Watson, 2016). From this perspective, markets can be viewed as constantly being made and re-made through the continued performance of several market shaping practices that are connected to each other in complex networks of practices (Andersson et al., 2008; Araujo et al., 2008; Hagberg & Kjellberg, 2010; Kjellberg, et al., 2012; Oosterveer et al., 2014; Vaara & Whittington, 2012).

In this third thematic research, we start from the mismatch between the practices of largescale retailers and those of small-scale local producers. They can be seen as two different 'worlds' operating with different organisational forms and rationales (Mount, et al., 2013). Indeed, local food systems are often associated with small-scale agricultural businesses that are scattered over relatively wide areas that market speciality types of food, and that have production and distribution characteristics different from large-scale retailers. This is in contrast to the practices of large-scale retailers, which are characterized by rationalisation, centralisation, consolidation, vertical integration, and specialisation (Abatekassa & Peterson, 2011; Clark & Inwood, 2015; Dreyer et al., 2016; Dunning, 2016). Combining practices of local food systems' actors with those of large-scale retailers, then, requires them to create a fit between the practices and business models of both systems (Storbacka & Nenonen, 2011).

In this research, we study the networks of stores of two retailers in Belgium that source and market local products. We study how practices need to be changed or adapted at shop level in order to create a 'configurational fit' between the different types of practices. In both cases, a mismatch between the practices of small-scale local producers and large-scale retailers becomes clear in various components of social practice. Hence, adaptations in all three practice components are necessary to make the practices of the retailers and the local producers 'fit'. We study how this mismatch is overcome. Our cases provide us with two different examples of how this can be done.

5.5.1 Research questions and theoretical model

Social practice theories aim to understand relationships between social structures and the actions of humans, and how these are dependent on and co-constitutive of one another (Crivits & Paredis, 2013; Gram-Hanssen, 2011; Reckwitz, 2002; Schatzki, 2012; Shove, 2014; Spaargaren et al., 2016; Watson, 2012). Although many different 'versions' of social practice theories exist, they all argue that "social and organizational life stem from and transpire through the real-time accomplishments of ordinary activities" (Nicolini & Monteiro, 2017, p. 2).

Hence, phenomena such as markets, organisations and societies are made out of practices repeatedly enacted over time and space (Nicolini & Monteiro, 2017; Orlikowski, 2010; Watson, 2016). Therefore, social practice theories take social practices as the central unit of analysis instead of individuals, norms, cultures, discourses or macro-level trends (Welch & Warde, 2015). Individuals, then, are seen as the 'carriers' of practices (Watson, 2012).

It has become increasingly popular to study markets as consisting of social practices (Andersson et al., 2008; Hagberg & Kjellberg, 2010; Vaara & Whittington, 2012). Such an approach acknowledges the socially embedded character of consuming, producing and selling goods within the larger systems of materials and beliefs that are necessarily connected to behaviours (Crivits & Paredis, 2013; Gram-Hanssen, 2011; Oosterveer et al., 2014; Reckwitz, 2002; Schatzki, 2012; Shove, 2014; Spaargaren et al., 2016; Watson, 2012). Andersson et al. (2008) define market practices as "the many concrete efforts that go into realizing economic exchanges" (p. 67). From this view, markets do not only consist of physical performances of buyers and sellers exchanging goods but "of all activities that contribute to constitute markets" (Kjellberg & Helgesson, 2006, p. 842).

Retailers' practices generally take a central position in such networks of practices, and therefore can strongly influence farming, food processing, retailing and food consumption by setting certain standards for production, and processing, and controlling the context in which consumers make their choices (Chkanikova, 2016; Oosterveer et al., 2012; Oosterveer, 2012).

In this thematic research, we follow Shove et al. (2012) who see social practices as active integrations of three elements: materials, competences and meaning. These categories are not meant as all-encompassing and 'real' categories. Rather, they are used as an analytic strategy that allows a certain method of thinking about practices and their dynamics. Practices come into existence when linkages are created between these three elements, and they may disappear if the links between the elements are broken (Welch & Warde, 2015). The element of **competences** refers to the skills, capabilities and knowledge that are needed to perform and understand the practice. Materials include every physical element that is connected to or needed to perform a practice. These may be objects, infrastructures, technologies, information or tools, but also include the body of the practitioner itself. Finally, the element of **meanings** represents the social and symbolic significance that may be attached to the participation in a given practice. This element thus refers to the ways in which practices are understood and includes norms, emotions, motivations, beliefs, ideas, understandings, customs, attitudes, influence of media symbols and affections and the role that these elements play in the shaping of human behaviour (Crivits & Paredis, 2013; Gosling et al., 2017; Hagberg & Kjellberg, 2010; Huttunen & Oosterveer, 2017; Shove et al., 2012).

In this research, we study two different types of markets: those of small-scale local producers and those of large-scale retailers. We argue that, although both deal with the production, sourcing and marketing of goods, these practices are different as the practices consist of different elements, and there are dissimilar levels of institutionalization to both types of practices. Because of this, the practices may be incompatible with each other. However, it has become increasingly popular for mainstream retailers to source and market foods supplied by local producers. In these instances, the mismatch between local and retail practices needs to be overcome.

5.5.2 Methodology, data sources and field work

In Belgium, almost 80% of all food is bought in supermarkets in a highly concentrated retail sector (Avermaete et al., 2015; Platteau et al., 2016). Some of these retailers have started to incorporate local food from small local farms in their strategy. In this third thematic field research, we focus on stores belonging to two major brands of these retailers in Belgium. To ensure anonymity for the retailers and their staff, we will refer to the retailers by using the codes R1 and R2. As both retailers referred to their marketing of local products as their 'local food strategy' we will do so too in this report.

The analysis is based on the qualitative analysis of 19 semi-structured interviews. The interviewees were assured their responses would be treated as anonymous. Therefore, we refer to the interviewees with a specific code.

Code	Function	Date	Length	Langu
Producer-1	Producer for R1 & R2, member and co-founder of	9.12.2	2h	Dutch
	regional platform	016		
Producer-2	Producer and member of regional platform	20.01.	2h	Dutch
		2017		
Platform-1	Coordinator regional platform	21.11.	1.5h	Dutch
		2016		
Platform-2	Coordinator regional platform	23.01.	1h	Dutch
		2017		
Platform-3	Municipal member of	9.12.2	1h	Dutch
		016		
R1-1 & R1-	Double interview at sustainability department R1	7.10.2	4h	Englis
R1-3	Regional coordinator local products R1	20.04.	3h	Englis
		2017		h
R1-4	Store manager R1	27.04.	2h	Englis
R1-5	Store manager and previous regional coordinator R1	15.05.	1h	Dutch
R1-6	Store manager R1		1h	Dutch
R1-7	Local products manager R1	23.05.	0.5h	Dutch
R1-8	Store manager and regional coordinator R1	02.06.	1.5h	Englis
R1-9, R1-	Triple interview, regional coordinator, store manager and	07.07.	2h	Frenc
10 & R1-11	local products manager R1	2017		h
R2-1	Local products manager headquarters R2	20.12.	3h	Englis
		2016		h
R2-2	Store manager, R2	24.03.	1h	Frenc
R2-3 & R2-	Double interview store managers R2	11.04.	1h	Dutch
R2-5	Manager fruits and vegetables R2	21.04.	1h	Englis
		2017		h
R2-6	Store manager R2	25.04.	1h	Dutch
R2-7	Store manager & SPOC R2	27.04.	45 min	Frenc

Table 5.5.1 The table of the coding of the interviews (codes used in the text)

We supplemented our interviews with knowledge obtained from newspaper articles, sustainability reports, folders, booklets and the websites of the retailers. Moreover, we visited stores before our interviews, to get a general feeling of the in-store marketing of local products in that particular store and, if needed, adapt the questionnaire.

In both cases, we aimed to interview a wide range of actors involved in the local food strategies. All interviews took between 45 minutes and 4 hours. Interviewees were chosen based on a snowball method, in which we first identified an interviewee at the headquarters of the retailer, who would then put us in contact with further interviewees. We aimed to obtain a wide view by including stores that were implicated in the local strategy to a great degree, as well as shops that were less involved so that we could get a clear view of the importance of the local food strategy for the overall company. We also aimed to spread the interviews over the different regions and provinces of Belgium.

For R1, we started with a double interview at the headquarters of the retailer. Next to that, we conducted semi-structured interviews with a mix of eleven regional coordinators, store directors and local product managers in the store. Some of the interviewees fulfilled several of these roles, or had, in the past, fulfilled several of these roles and thus had a broad overview of the strategy itself and of the way in which the local strategy was implemented.

In the case of R2, we started our interviews with the manager and initiator of the local product strategy. From there, further interviewees were identified. We proceeded to interview one of the managers of the sourcing of fruits and vegetables on the national level. Moreover, we interviewed five store managers, some of whom also performed the role of Single Point of Contact (SPOC) for local food in their region.

Next to working together directly with producers, both retailers worked together with local platforms. These platforms differ by their mode of organization. Some organize transportation and invoicing, while others just promote local products, or defend producers' interests. We conducted five interviews with actors from such platforms. Moreover, we gained additional information from documents and websites on the functioning of these platforms. These platforms are mostly tied to the geographic boundaries on the provincial level and in most cases, they are either initiated or strongly supported by provincial government bodies. In the interviews with actors from these networks, we therefore aimed to obtain a balance between producers, government officials, managers and actors responsible for logistical issues.

The analysis was based on the careful reading and coding of the field materials (transcripts of interviews, field notes, brochures and websites). We had some pre-defined categories of analysis that were based on the theoretical framework of this article and the formulated research question. However, the boundary of a practice is often hard to define and is an empirical rather than a theoretical question. In this, practitioners are suitable to help define the boundaries of the practice as they "*customarily name and examine practice in objectified terms*" (Nicolini & Monteiro, 2017, p. 12). We, therefore, left enough space for the interviews

and field data to add to or change the used categories and identify the relevant activities and practices (Fuentes, 2015; Kjellberg & Helgesson, 2007). To do so, we made use of the following types of questions:

- What type of practices are carried out to source and market the local products and what do these practices look like?
- How do the retailers/local producers need to adapt any of the elements of their practices in order for their practices to 'fit'?
- Which elements were important to determine how practices changed within the local strategy?
- How do the practices of the local producers fit within the overall strategy of the retailers?

In short, the analysis was based on the theoretical framework, the formulated research questions and the empirical data, which together were used to guide the coding and develop the categories of analysis.

5.5.3 Results and discussion

a) Local food strategy of stores owned by the R1 retailer

R1's local food strategy was initiated by its sustainability department as a part of the CSR responsibilities of the company. The strategy itself started from a cooperation between the retailer, members of a farmers' organization, a representative of the provincial administration and an academic. First, meetings were organised in several provinces to find whether producers would be interested to work with R1. During the meetings, the producers' reluctance to work with a large retailer became clear. This led R1 to propose to develop a separate logistical and financial circuit that was adapted to the needs of the local producers.

"Because they asked us a lot of things which we were not, at the beginning, able to do. (...) I said: "okay. I'm not quite sure that it will be possible to work with the local producers because they are asking that, that, that and that, which are practices we don't do, globally, generally". And my boss said: "(...), I want that you try to establish this new logistical circuit. (...) Because the flexibility is very important. (...) If we had used, directly, the existing structure here, it would be too complicated for the local producer" (R1-1).

In this system, the producers that deliver their produce to R1 are introduced into a database, which is managed by an external company and which is adapted to the needs of the local producers. The logistical system that was developed accordingly was strongly simplified in comparison to the 'normal' system. For example, contracts were designed specifically with the needs of the local producers in mind and were signed between the store manager and the producer. The contract for local producers was six pages long, while a standard contract contained 256 pages. In general, there were no conditions or obligations for the producer towards R1, and producers were allowed to stop delivering their produce to R1 at any time.

Also, the separate system enabled R1 to introduce local producers into the system faster than through the normal system. Once a producer was in the system, interactions generally took

place directly between store employees and producers, via different types of systems, e.g. email, fax or telephone, instead of via automated systems. In other words, the management of orders was shifted from the level of the central organization to the level of the store, and a certain level of autonomy was regained and the power to make decisions on the buying and selling – of previously approved products – was moved to the store level, and the involvement of central buying departments was (often) circumvented:

"It is not the same as the distribution of goods in general. Because, in fact, it is with direct connections. While normally, the goods will go to the central. The order is placed automatically, and it comes to the store. While here, we order with the producer, who then comes to deliver the products to us. And after that, they make their invoices (...) and [R1] pays them within 30 days. So that was a whole system that needed to be put in place, which is completely different from life in large-scale retail" (R1-10).

b) Local food strategy of stores owned by the R2 retailer

The local food strategy of R2 started as a part of its sustainability strategy, but was managed by a small team located in the central facilities of the retailer.

Although the strategy started small, it has grown quickly, and it has become an important part of the retailer's strategy since then, although – compared to overall sales – local products only account for a small share. Over time, the project has become more embedded in the strategy of the company, although the strategy is still dependent on a small team. The local assortment team is based in the central facilities of R2, and approves all the local products for Belgium.

Orders and deliveries were taken care of directly between store personnel and the producers. Like in the case of R1, this meant that producers had the extra task to deliver their products to the stores, in a timely manner, while respecting certain standards (e.g. food safety, barcodes, invoices). However, compared to R1, R2 made fewer adaptations in favour of the local producers. For example, no separate structures were implemented to create the barcodes, or to invoice the deliveries. Also, most administration and contracting still took place through the centralised model of R2. In the case of R2, there was a heightened flexibility too towards fluctuating supply, especially in the case of delivery times. Nevertheless, R2 did expect local producers to deliver both to multiple stores and deliver relatively consistently.

"So, all producers, from the moment they enter into an agreement with [R2], need to respect the specifications imposed by [R2]. (...) Sometimes, some of them [the producers] are a bit naive, because they say "here I will enter in the store [here], but well, entering in [R2] [in that store], also means you enter [in the stores around]" (R2-2).

Hence, mainly the producers who had to adapt their practices to those of the retailer and, unlike R1, R2 did not support the producers in this. As some of the adaptations were not only costly but also required expertise (filling in forms, obtaining barcodes, etcetera) it was difficult for some to enter this system.

"It is complicated. Some [producers] are a bit bigger and do that more often (...) but the very small ones, don't know what to do, and think: 'what does all of this mean? And what should I fill in here? And what is the purpose of this?' " (Platform-2).

Thus, the local producers were expected to – with some exceptions - fit into the 'normal' system. In the cases where this was difficult for producers, no further support was provided. Hence, only those farmers who already had the skills and materials needed to adapt to R2, or were able to develop these by themselves, were able to deliver their produce to R2. This, then, in some cases provided a barrier to enter the system, as adapting the packaging and buying the barcodes required investments. As a result, only larger local suppliers, with relatively high profits and relatively large volumes were able to comply with these rules.

"So you have to comply with all these parameters. And that is so much paperwork, it is unbelievable. (...) We directly did that, because we wanted to stay in, but there are a lot of producers that only have one or two products that do not want to make that effort, they drop out" (Producer-1).

c) Mismatch within the organisations between the 'local' and 'mainstream' practices

We will first focus on how a mismatch existed in general between the 'local' and 'mainstream' practices, and how these were overcome in different ways by both retailers. The second part of the discussion will revolve around the importance of the space that is granted for individuals and for agency within the overall structures of the companies in which these strategies are implemented. In the third and last part of the discussion, we discuss the influence of the local food strategies of both retailers on their 'normal' practices.

Furthermore, at the start of this article, we stressed the importance of 'performance indicators' for the way in which practices are performed by retailers, as these indicators provide an expectation as to how a certain practice should be performed. We argued that some of the most important performance indicators related to product harmonization, product quality, high and consistent volumes, food safety, hygiene, quality, prices and the standardisation of shapes, tastes and production methods of products. Moreover, we argued that these indicators had developed alongside the materials and skills needed to fulfil the practices. The examples above have shown us how in both cases ideas of how practices should be performed were challenged and adapted in the case of the local strategies. Indeed, ideas of quality, justice and the development of the local economy were seen as more important than these key performance indicators. Consequently, in both cases, space was given for noncompliance with the overall Key Performance indicators. Also, the local practices challenged ideas of how and by whom practices should be performed through the reconfigurations of the practices discussed in this article. Other authors have argued similarly, that through the reconfiguration of practices, normality, or a normal way of doing can be challenged and shift over time (Crivits & Paredis, 2013; Fonte, 2013; Gram-Hanssen, 2011; Shove, 2003).

These findings suggest the importance of the element of meanings in the changing of practices (Crivits & Paredis, 2013; Fonte, 2013; Huttunen & Oosterveer, 2017; Storbacka & Nenonen, 2011). However, for these meanings to be turned into concrete actions or routines, they needed to be translated into and aligned with competences and materials (Fonte, 2013). This shows the importance of looking at practices in their entirety instead of looking at one or two elements of practices only. Studies that would have focused only on performance indicators, technologies, regulations, infrastructures or skills would have necessarily missed these

connections and would have failed to grasp the bigger picture of how and why practices change (Oosterveer, 2012).

d) Agency vs. structure

In both cases, the strategies were started and carried out by one or multiple individuals that were granted the space to shape the local strategy. This indicates the importance of motivated individuals to start up and make a success of such an initiative (Lehner, 2015). Moreover, for the operationalization of the strategies, the autonomy to shape the local strategies was moved from the central areas of the retailers back to the store-level. In other words, individuals in the stores became the carriers of many of the practices of sourcing and marketing local goods. Therefore, at the level of the store, the skills to do so had to be (re)developed and the material structures needed to be adapted to facilitate this. Bloom & Hinrichs (2016) found similar outcomes in the case of Wal-Mart's local sourcing strategy:

"[Produce managers] are trained or somehow they are instructed to do all of their food ordering through the distribution centers. (...) Such observations underscore how Wal-Mart's deep "genetic code" favouring central management authority and distribution shaped implementation of a purchasing option such as DSD that might facilitate effective local sourcing. Longstanding centralized practices have socialized store- level employees to operate in ways beholden to and reinforcing of central management control, favouring a centralized distribution system (p.10)"

The ability and willingness of the employees to engage in these performances therefore determined largely how the practices were performed. This suggests the importance of agency in the shaping and changing of practices (Crivits & Paredis, 2013; Gram-Hanssen, 2011; Huttunen & Oosterveer, 2017; Shove et al., 2012). This increased reliance on individuals, however, also re-introduced a certain insecurity in the outcomes of the practices:

"Each department has a manager. And there are managers that strongly believe in the project (...) But of course there are also always managers who will say "what should I do with my products and how should we do this, and won't sales decrease?" So often it is a question of (...) convincing people of the added value" (R1-5).

Furthermore, both retailers did not grant the same level of autonomy for individual employees to act on their ideas and shape the local strategies. In the case of R1, we found that the individual employees gained more autonomy concerning the local products than in the case of R2. Indeed, R1 left the central buying department out of the equation while in the case of R2, relationships were still handled centrally, and more control was placed on the way in which the local strategy was implemented, while only the buying, selling, and deliveries happened through direct relationships between the stores and the producers. This suggests that the power of actors depends on the space they get in wider networks of practices or in overarching structures to act upon their ideas.

Storbacka and Nenonen (2011) also argue that the power of an actor to change practices and business models depends on their relative strength within the overall structure or network of a company. "The power of the actor's mental models and business models to influence a market configuration is mediated by the focal actor's position in the network, its clout, and the

fact that a change in any configurational element is likely to evoke a reaction from all actors wanting to shape the market in their favor" (p. 246).

These findings show that, for a local strategy to be developed, a certain degree of decentralization needs to happen, in which decision-making is moved from the central grounds of a retailer towards the store-level and individual employees. Hence, although practice theories decentralize the carriers of practices as an object of research, these examples also show that, the higher the flexibility to shape a practice, the larger the influence of the carrier can be on the outcome of a practice. The room for manoeuvre that employees get to shape the practices, then, matters for the way in which they can shape the results of the practices. Such a development is contrary to general tendencies of centralization and automation in large-scale retailers and creates more variety and uncertainty about the way in which practices are performed.

In summary, the cases show us that it is important to take into account the interplay between agency and structure. Indeed, the structures of the company might enable or inhibit the change in practices in favour of the local strategy as well as determine the space that is allowed for an overall change in the structures or common practices of a retailer. Practice theories have a real added value here, as they allow us to do so, by going beyond the agency-structure dualism and aiming to understand the relationships between social structures and the actions of humans, and how these are dependent on and co-constitutive of one another (Crivits & Paredis, 2013; Gram-Hanssen, 2011; Reckwitz, 2002; Schatzki, 2012; Shove, 2014; Spaargaren et al., 2016; Watson, 2012).

e) Influence of local food strategies on normal practices

In this last part of the discussion, we examine whether the practices of sourcing and marketing local goods had an influence on the 'normal' practices of both retailers. To do this, it is important to discuss where the local food strategies were 'located' in the organisational structures of both retailers. We found that both retailers placed the local strategy in different parts of their overall structure. Both retailers started from a sustainability perspective. However, although for R1 the strategy remained under the banner of the sustainability department, in the case of R2 the strategy moved through different departments and had become a part of the overall business strategy. This difference in where the strategy was 'located' could explain the different meanings that were part of each of the practices, as the goals of the strategies were different. This might explain why, in general, R1 was more willing to adapt and change the practices in the favour of the local producers, while R2 only chose to work with the producers that were more compatible with the practices of the retailer in the first place. Hence, the goals of the practices, ideas of what practices should achieve were different for both retailers, and hence the willingness to make adaptations to the practices of the local producers for the sake of the local strategy differed for each of the retailers.

In addition, both retailers viewed their local strategy as complementary to their overarching strategy and one of the main benefits of local products was thought to be the fact that consumers were offered something they asked for – local products – while being able to shop

for complementary products at the same time. Thus, for both retailers, the local practices were not meant to replace or change the general or normal practices of the retailers.

"People are asking for products that are coming from close by, without having to go to the producer. Because, in the end, it is that: being able to offer local products in a large retailer, it's that, well, one has the product coming from one's 'neighbor', but at the same time having all these other things, and during hours that are different from those of the local producer. (...) having them [the local products] here, allows the client to find local products every day until 20.00 o'clock" (R2-7).

These findings lead us to question whether in both cases the local strategies led to change within the 'normal' practices of both retailers. Although for both retailers the strategy became more important than was expected at the beginning, no real change was detected in the 'normal' practices of sourcing and marketing goods. Rather, the local practices were meant to show a different 'face' of the retailers, instead of changing the general practices of the retailers.

5.5.4 Follow-on study on institutional entrepreneurship

The conclusion on decentralised institutional entrepreneurship in the retailers' stores can be deepened by analysing a medium scale transition initiative where local entrepreneurship is highly valued. One such case if offered by a healthy and fast-casual food chain in Belgium.

Recent years have seen the emergence of new types of fast food chains, the so-called 'healthy fast-casual' chains proposing healthier dietary patterns for eating on the go. Following this trend, healthier 'grab and go' lunches are also increasingly provided in food retailer's shops. The healthy fast-casual case that we study for this paper has pioneered this new trend of reconciling fast food with healthy food. Indeed, the founders of the company started on the premises that, in big cities, people who had only little time to eat could not find a healthy 'grab and go' lunch. The founders thus embarked into an explorative innovation that resulted in the development of new markets for 'healthy fast-food' which are now attracting many players in the food distribution and catering field.

In this light, the founders of the healthy fast-casual food chain (hereafter HFF) can be seen as institutional entrepreneurs who try to change or alter the 'rules of the game' by developing new practices around healthier eating even when time is scarce. In this process of institutional change, it is vital that the beliefs and values that go along with this new practice gain legitimacy. Indeed, as explained by Dolfsma and Verburg (2008, p. 1040): 'an institutional practice lacking a firm normative foundation in shared socio-cultural values will be perceived as empty and may soon be abandoned'.

In the following sections, we investigate which sets of values are developed and primed both within the company and amongst other stakeholders for the new practice of eating fast and healthily to gain legitimacy, and its broadening to questions of sustainability.

In order to do so, we have used the circumplex model developed by Grouzet et al. (2005) which organises values/ life goals along two major axis. The first axis used to structure life goals is the intrinsic vs. extrinsic axis. Self-acceptance, affiliation, and physical health are common intrinsic goals. They are related to the psychological needs for relatedness,

autonomy, and competence, as explained in self-determination theory (Deci and Ryan, 2000; Ryan and Deci, 2000). Conversely, financial success, image, and popularity form typical extrinsic goals aiming at obtaining some external reward or social praise. The second axis relates to the 'physical self' vs. 'self-transcendence' dimension. In this axis, we find, at one end of the spectrum, goals related to caring for one's physical self (e.g. safety and health, bodily pleasures and hedonism, financial success as a material means to achieve those ends) and, at the opposite end of the spectrum, dimensions that transcend the self (e.g. benefitting society, taking future generations into account, seeking universal meaning and understanding).

The fieldwork was based on face-to-face interviews with key persons related to the company. The following 9 persons were interviewed: founder, general manager, product manager, franchise manager, marketing manager, director of a franchise, employees of non-profit organisation interacting with the company, supplier engaged in sustainable production practices.

Following an inductive approach, we used a qualitative analysis for the interviews, starting from the words of our respondents in order to build theoretical constructs from our material (Auerbach and Silverstein, 2003; Gioia et al., 2013). The quotes have been translated verbatim by the authors.

These interviews were supplemented with information obtained from several documentary sources. Those sources include websites of the different actors interviewed, sustainability reports and information provided by civil society organisations.

In addition, we carried out hours of field observations in different restaurants of the chain which provided us with direct observation of products sold, staff members, customers, marketing, and more generally, of the atmosphere in the restaurants.

a) Introducing disruption by recombining fast eating with healthy eating

In the case we study, the founders of the company, as well as the managers who were in the company almost from the start of the project, are well aware of the creative and disruptive aspects of the innovation they introduced, compared to what was offered to consumers in the fast-food sector at the time. The concept of reconciling fast eating with healthy eating seems to be clearly understood by all the managers that we interviewed and revolves around offering more balanced and tasty recipes based on natural and healthier products.

In addition to the quality of the food itself, a great deal of attention is also dedicated to the atmosphere in the restaurants (e.g. friendliness of the staff, furniture and noise level), so that customers can have a pleasant experience.

In light of the two axis-model for values and life goals that was explained in the previous section, we can thus argue that the innovation introduced by the HFF company primarily relates to care for the physical self and hedonism, as expressed by a manager:

"Immediate pleasure or immediate wellbeing, let's say, that is based on pleasant, innovative recipes."

However, this hedonic dimension is also seen on a longer term:

"[The client] realizes that he is doing good to himself in the long run."

According to the founder we interviewed, it is this long-term dimension that paved the way for sustainability concerns (e.g. environment). However, as explained by another manager, this evolution towards more sustainable practices appears more as a process than a strategy:

"There was not necessarily a strategy, let's say, in terms of sustainable development or organic, for example. These are things that came into the movement (...) that were not conceptualized and planned".

The following paragraphs explain how this process of increasing the sustainable dimension in the HFF company unfolded, and on which values it rested.

b) Venturing into a more sustainable dimension

Although the premises of a move towards sustainable entrepreneurship seemed to have been, according to interviewees, somehow, embedded in the project from the start, the trajectory itself owes much to serendipity and meeting the right person at the right time. Indeed, managers repeatedly use terms like 'by chance', 'meeting people along the way', 'companies crossing their way', etc. to describe the process of increasing the sustainable dimension in the HFF company. In the following paragraphs, we will see how customers, and, especially also, employees, played a role in this move towards more sustainable practices.

Interestingly, some of the moves towards sustainability that the company took have been initiated by customers and employees. For example, an NGO in environmental protection has 'crossed their way' due to a customer:

"It was a person who was a client... and who brought back his paper bag every day ... The person at the cash register hears: '(...) I am for reduce, re-use. (...) And the person at the cash register passes this on to the manager. And the manager calls us. (...) so we said (...) we will motivate people to do that ".

Later, this resulted in a collaboration with this NGO, which proved, in turn, an important step in structuring the HFF company's path towards more environmental-friendly practices.

Admittedly, employees are an important driving force for developing more sustainable practices:

"A young woman who had been hired: 'there are not enough organic products here".

Restaurant managers also proposed several ideas for participating in environmental and social actions (e.g. providing food to homeless people).

In addition to being initiators in terms of sustainability issues, employees are also seen are important 'receivers' of this evolution. Indeed, several managers insisted on the fact that these

environmental and social dimensions are important for people who work at the HFF company to find their job meaningful and motivating.

"The motivation of our staff comes precisely from being in a company that provides meaning to what they do, and this meaning, we have found it in organic food, in the donation of unsold food, in the attention we give to providing products that are good for the health".

Even if the hedonic dimension is still present, the move towards more sustainable practices seems thus to be imbued with self-transcendent goals such as caring for the environment (e.g. including organic products, reducing energy use, favouring local products) and for the community at large (offering leftovers, etc.). This is not to say that more extrinsic goals (e.g. the HFF being financially successful) are no longer there. These extrinsic goals are openly admitted too and, if, for example, no healthier or more local alternatives are available at the time a product is needed, the HFF will turn to regular suppliers.

However, managers seem to be highly motivated to find the most tasteful, local, sustainable and fair trade products they can. They seem also committed to prime more self-transcendent goals in their teams:

"My objective is to share with the teams projects that are really sustainable, I mean, projects that have a 360° impact : social, environmental... and we can share that with our teams (...) so that, you see, they understand the different issues."

This seems to create a self-screening bias in the people that are attracted by the company which, in turn, increases the coherence of shared goals inside the company, as well as with their partners:

"Those who come for other values, like for instance, 'm'as-tu-vu' or money, well, simply, they don't stay. So, you see, there is a kind of virtuous circle in this... which has pushed us to try to be more and more consistent and coherent"

However, although the move towards sustainability is considered as a powerful way to motivate employees, self-transcendent values are not primed in the general public, as the founders feel there is a risk in doing so:

"[concerning communication on sustainability issues] We made a big fence, I had to insist on that, because the marketers, at home, wanted to do more (...) and I find it very dangerous (...) the more you communicate the more you are looking for trouble (...) the other immediate reaction, I think, of people, is to say, yeah, but all that is marketing, it's bullshit, they do not really do that. So, in fact, finally, you are losing when talking about it too much, I think. On the other hand, the staff to whom we can explain things, they have time (...) and then, what we try is percolating through the staff".

A reason that was also put forward is that the company is legitimate in providing healthy lunches, but not necessarily on sustainability issues. Therefore, they want to stick to grounds where they feel legitimate. In addition to that, they don't want to 'annoy' customers with too much information or moralising communication. This is even more the case as they know that an important part of their customers are 'pragmatic' people who come to eat at the HFF restaurants because it is convenient, because the food tastes good, and who, eventually, as a manager put it "have a vague sense that we do things in a proper way".

This tenuous form of communication on sustainability is, however, seen as sufficient to create trust in the customers, which, in turn, makes it unnecessary to communicate more on these issues. This results in the fact that the values and life goals primed in the general public relate mostly to physical self and hedonism.

On the contrary, as we have already mentioned earlier, there is a feeling that it is positive for the motivation of the employee to talk about sustainability, and thus, to dwell on more self-transcendent goals. On a very practical level, a major difference between employees and the general public is that, as a manager puts it, with employees, you 'have the time' to explain the issues at stake, which is impossible with customers and the general public. As a result, some employees might change their own daily practices:

"I think that what [the HFF company] does, the employees also share that. Personally, I think that it is important to eat well, to pay attention to where things come from, where food comes from (...) I will maybe eat less meat, but of a better quality (...) try to eat seasonal, local..."

This 'trickle-down effect', as one of the managers named it, is something that could happen not only with employees, but also with other types of partners, as we will see in the following section.

c) The collective dimension of changing practices

These employee and manager driven (instead of consumer driven) institutional changes have an impact on the practices of the company in several ways. Indeed, these changes impact the procurement process (e.g. with more organic, fair-trade, local and seasonal products). Moreover, they also impact other practices such as the processing of food and packaging issues, the sorting of wastes, as well as the reduction of use of resource and waste.

However, the trajectory of the HFF company towards more sustainable practices is intertwined with the trajectory of other actors and, as a manager expressed it, this evolution is also 'supported' by a more general societal trend that is reinforcing the legitimacy of sustainable practices. In this section, we will examine how what we have called a 'congruence of values' with other actors actively supported the evolution of the company towards sustainability and how, on the contrary, it proved much more difficult to include 'historic suppliers' in the move.

Indeed, the congruence of values seems to play an important role in the relationship of the HFF company with other actors. As expressed by a non-profit organisation, they engaged in a relationship with the HFF company because "we know they have an ethical dimension, they have values, they propose quality products, and so, it seemed to us to be an interesting collaboration".

For the HFF managers, interactions with other actors have had an impact on the trajectory towards more sustainable practices. Some actors have inspired the company, or supported them in structuring their actions towards sustainability. A manager of the HFF company

compared this to a 'snowball effect' which always goes in the same direction and that is nourished by some relationships with other actors.

Another actors which is also working with the HFF company confirmed the importance of adhering to the values carried out by the HFF company.

"there have been some [partnerships] coming in and then going out,... you cannot stay unless you adhere to their values and you finally find them more or less as important as economic profitability."

This was also echoed by interviews of HFF managers who became progressively aware of the importance of shared values in their business relationships after they experienced difficulties when values were too divergent. In turn, the HFF company became increasingly attentive to sustainability dimensions when concluding new business relationships with suppliers.

However, it has neither been an easy nor sometimes a successful task to bring some of the 'historic' suppliers on-board. Although the HFF company tried to put forwards the fact that they had themselves succeeded in achieving moves towards more sustainability and that it had a positive impact on their company, this did not seem to be enough to convince some of their historic suppliers. Indeed, as a manager of the HFF company put it:

"You cannot change the people you were already interacting with, but the new ones, yes, you can change your way of interacting with new suppliers."

In this sense, it can be expected that the moves towards more sustainable practices of the HFF company have strengthened other actors with whom there was a congruence of values, and might have had, to some extent, a 'trickle-down effect' on other actors that want to enter into a business relationship with them.

d) Conclusions

Our material suggests that the process of institutional changes towards more transcendent shared views and goals, such as those related to environmental or social concerns, is a slow and sort of background process in the healthy fast-casual food chain case. Interviewees repeatedly use terms like 'by chance' or 'along our way' regarding their interactions with organisations from civil society. This tends to indicate a form of serendipity rather than strategy, at least in the beginning of this process.

In addition, the company's employees seem to play an important role as a driving force towards more sustainable practices (e.g. including more organic products or proposing more vegetarian and vegan meals). This importance of the employees in the institutional move towards sustainability came as an unexpected result. It is consistent with the willingness of the managers to provide greater cohesion, sense-making and adhering to shared views and goals within the company.

Moreover, the congruence of values with other actors have influenced positively the evolution of the HFF company, an evolution that was also 'supported' by a more general societal trend that reinforces the legitimacy of sustainable practices.

However, although the move towards sustainability is considered as a powerful way to motivate employees, it is also perceived as a risk if put forward towards the general public. As a result, despite the changes that took place inside the company, external communication keeps predominantly priming values and lifegoals related to wellbeing and physical self for customers, while the more in-depth changes were mostly used for building internal coherence. As reported in our interviews, it seems that the company actors, in spite of active institutional entrepreneurship for sustainability, do not consider that priming these values is yet sufficiently socially accepted to use it for their communication with the consumers. This clearly imposes a limit on the transformational power of these institutional changes on the wider public.

5.5.5 Recommendations from the thematic research

This third thematic research analyzed the ways in which mismatches (in the social practices' research) or alignments (in the follow-on research) exist between the practices of local producers and those of large-scale retailers and fast food chains. To do so, we took a practices approach and found that a mismatch exists between the practices of large-scale retailers and those of local producers, which became apparent in all three elements of practices: materials, competencies and meanings. In order for large-scale retailers to be able to source and market local goods, then, this mismatch needed to be overcome in all three elements: the competences of all actors involved, the materials used in the marketing practices and that the part indicators, such as quality, shape and volumes. However, our cases also suggest that the extent to which these adaptations are made can differ and that they largely depend on the position of the strategy of local stores within the overall strategy of a retailer or a healthy fast-casual food chain. Moreover, our results suggest that for the sourcing and marketing of local goods, decision-making power needs to be moved back to the level of the store, allowing a higher degree of individual initiative and institutional entrepreneurship by store managers and employees in reconfiguring new practices.

The follow-on research also shed light on how managers in the healthy fast-casual food chain fell a weak legitimacy and a potential risk in priming self-transcendent values in the general public. As a result, they relied on more in-depth changes towards sustainability for building internal coherence and kept priming lifegoals related to wellbeing and physical self in their customers. This has important implications as giving priority to one set of lifegoals tends to diminish the importance of the opposing set of lifegoals (in this case, caring for the community or future generations, for instance). It also calls for actors implied in promoting sustainability transition, and perhaps especially for public authorities, to be attentive to the values and lifegoals they are priming in the public as issues of legitimacy are important for institutional changes.

5.6 Summary of the project recommendations

This project aimed to explore the role of the transformation of motivations, values and visions in the transition of the agri-food system and specifically of the instrumentality of hybrid governance arrangements—arrangements in which both actors of the mainstream agri-food system and actors from niche/grassroots innovations participate—therein. We identified three transition pathways for which we formulate recommendations: (1) changed led by grassroots innovations, (2) change led by mainstream actors and (3) hybrid arrangements.

1. Our research has demonstrated that the key feature of a successful in-depth transformation is the embeddedness of a given initiative in the broader social network of organisations experimenting and learning on in-depth lifestyle changes for sustainable agrifood systems. To facilitate this embedding process, we recommend the support of bridging organisations, such as regional platforms, umbrella organisations, knowledge hubs, etc.

First, such umbrella organisations, supported both by public authorities and members' fees, can overcome some of the insufficiencies related to inefficient distribution channels, lack of administrative support and poor infrastructure that often characterize grassroots initiatives.

Second, such umbrella organisations may facilitate social learning amongst grassroots initiatives and with other sustainable food associations. This collaborative aspect is often less straightforward, however, than the more conventional supporting activities in terms of exchange of best practices, administrative support and legal advice. Indeed, successful social learning in networks of non-state collective actors depends on "process" dimensions such as non-coercive deliberation and inclusive participation.

Further research is needed to document the effects of these organisations on the development of local food networks and to better understand the various governance and complex process management needs of the collaborative tools established in such larger-scale social learning processes.

2. Our results suggest that there is a considerable, largely untapped potential of appealing to social responsibility, which may be a significant driving force for change in mainstream actors, equal in importance to economic incentives or social/legal expectations. Such appeal works most with the internal motivations of the management and employees of such organisations. We, therefore, recommend stimulating the institutional entrepreneurship of employees and managers within mainstream organisations through decentralized experiments, in order to set up a social learning process that facilitates the transition towards sustainability. However, the upscaling of such experiments requires a deeper change in the motivations, values and visions of mainstream actors.

More specifically, such experiments and social learning processes are also important to overcome the mismatches between the practices of local producers and those of large-scale retailers and fast food chains. Such mismatches were found at the level of the competences

of all actors involved, the materials used in the marketing practices and the meanings attached to performance indicators, such as quality, shape and volumes. However, our cases also suggest that the extent to which these adaptations are made can differ, and that they largely depend on the position of the strategy of local stores within the overall strategy of a retailer or fast food chain. Moreover, our results suggest that for the sourcing and marketing of local goods, decision-making power needs to be moved back to the level of the store, allowing a higher degree of individual initiative and institutional entrepreneurship by store managers and employees in reconfiguring new practices.

Further research is needed to investigate how such processes can be accelerated, as well as how medium-size companies in the agri-food sector can be incentivized.

3. Our analysis suggests that in order to increase the transformative potential of agri-food system initiatives, hybrid governance arrangements between different types of actors need to be established. The inclusion of new stakeholders upholding different sets of values is key to reaching a higher transformative potential.

A desirable shared governance should then involve not only various categories of agri-food and non-agricultural actors, through the participation of organisations representative of the dominant interests, but it should also and most of all aim at allowing more voice for interests that have been hitherto largely excluded or marginalised, upholding ethical values that are currently missing in the conventional supply chains, so as to foster the dissemination of a more systemic ethics of food.

6. DISSEMINATION AND VALORISATION

6.1 Presentations at international conferences

de Callataÿ Charlotte, (UCL) presented the conference paper) Social network analysis of alternative local food systems in Belgium (P. De Snijder, Hélène Joachain, Thomas Bleeckx, Tessa Avermaete, Jose Luis Vivero Pol, Marek Hudon, Olivier De Schutter, Tom Dedeurwaerdere. 2015 - UCL-KUL-ULB) at the 11th International Conference of the European Society for Ecological Economics 2015, Leeds, UK. <u>http://www.esee2015.org/</u> 30-6-2015- 3-7-2015

VIvero-Pol, Jose Luis: (UCL): EU Consortium for Political Research General Conference, Montreal ; Transition towards a food commons regime: re-commoning food to crowd-feed the world – ECPR General Conference 2015, 26-29 August 2015, Montreal, Canada

Avermaete, T., Annaert, B., Bleeckx, T., Dedeurwaedere, T., de Callataÿ, C., De Schutter, O., De Snijder, P., Hudon, M., Joachain, H., Mathijs, E., Vivero Pol, J.L. (2015). (UCL-KUL-ULB): Social network analysis of alternative local food systems in Belgium. Poster presentations at the International Conference on Global Food Security, 11-14 October 2015, Ithaca, USA.

Bui S., Costa I., De Schutter O., Dedeurwaerdere T., (UCL): presented « Governance of sustainability transitions: key values and features derived from Belgian initiatives aiming at introducing local products on supermarket shelves », 27th Congress of the European Society of European Sociology, Krakow, Poland, 24-27 July 2017

Bui S., Costa I., (UCL), presented "Targeting sustainable mass consumption through innovative governance arrangements", 9th International Sustainability Transitions conference, Manchester, UK, 12-14 June 2018

Costa Ionara (UCL) presented paper "Organisational Learning for Sustainability Transition", co- authored by Ionara Costa, Sibylle Bui and Tjitske Anna Zwart ; Sustainability Transitions Conference (IST), 18-21 June 2017 in Gothenburg, Sweden

Zwart Tjitske Anna (KUL) presented "Reconfiguring food systems towards sustainability through multi-actor collaborations: a practice based approach", co-authored by Erik Mathijs ; Sustainability Transitions Conference (IST), 18-21 June 2017 in Gothenburg, Sweden

Costa I., Bui S., Zwart T. A., (UCL-KUL) 2017. "Organisational learning for sustainability transitions", 6th EMES International Research Conference on Social Enterprise, Louvain-la-Neuve, Belgique, 3-6 juillet 2017

Costa I., Bui S., De Schutter O., Dedeurwaerdere T., 2018. "Learning for sustainability transitions: a discussion on the role of mainstream business actors towards more sustainable food systems", 9th International Sustainability Transitions conference, Manchester, UK, 12-14 June 2018

Zwart, Tjitske Anna (KUL) presented "Moving into the grey zone: looking beyond the 'local' and the 'niche' to foster transitions towards a more sustainable agro-food system"; co-authored by Erik Mathijs ; XXVIIth European Society for Rural Sociology – ESRS congress, 24-27 July 2017, Krakow, Poland

Alicia Dipierri (ULB) presented "A positive transition towards a sustainable food system. The role of for-profit economic actors' ecological responsiveness"; co-authored by Marek Hudon and Tom Dedeurwaerdere, 15th Congress of the International Society for Ecological Economics, 10-12 September 2018, Puebla, Mexico.

6.2 List of Deliverables

All "public dissemination" deliverables available on line at http://www.food4sustainability.be/

Deliverable 1.1 Conceptual framework for research on agro-food transition towards sustainability

Deliverable 1.2 - Report on the Policy tools for governing the Transition of the Agro-food system towards Sustainability

Deliverable 1.3 Report on transdisciplinary workshop 1 and Mapping of public policy measures for agri-food initiatives : BRAIN-Food4Sustainability-

Deliverable 2.1 – Mapping of transition initiatives

Deliverable 2.2 – Social enterprise based transition movements between transformation and reform. The case of transition initiatives in local food networks - Results of Interviews on actor's Motivation in Collective process for Transition

Deliverable 2.3 Multistakeholder workshop – Preparation – Document for discussion : « Projet pilote de recherche partenariale - LPTransition (UCL) – acteurs sociaux sur les circuits courts durables » - and agenda 19 November 2015

Deliverable 3. -Theoretical Framework for Phase II/ Development of local sourcing in supermarkets and emergence of healthy fast casual food chains:

Deliverable 4.1 – Mapping and analysis of major market-related collective governance arrangements relying on either participatory certification systems or industry-wide codes of conduct

Deliverable 4.2 'Governance of sustainability transitions : Key values and features derived from Belgian initiatives aiming at introducing local products on supermarket shelves' - Short paper presented in 2017 — Sibylle Bui, Ionara da Costa, Olivier De Schutter, Tom Dedeaurwaerdere.- article under review 2018

Deliverable 5 1. "Learning for sustainability transitions : a conceptual framework - the role pf mainstream business organization in the context of niche-regime interaction ", Sibylle Bui, Ionara da Costa, Tjitiske-Anna Zwart, Hélène Joachain. (this work is still being worked over to be published) - *paper in preparation*

Deliverable 5 .2 Multistakehoders workshop see report in Annexe 1 <u>http://www.vilt.be/lokaal-is-zoveel-meer-dan-kilometers-alleen---lokaal-in-de-supermarkt-kan-dat-wel</u>

Deliverable 6 Synthesis final report

7. PUBLICATIONS

ou are requested to attach a copy of the articles to the final report or to mention the references allowing access to this article if it is in Open Access.

Journal articles

Dedeurwaerdere, T., Polard, A., & Melindi-Ghidi, P. (2015). The role of network bridging organisations in compensation payments for agri-environmental services under the EU Common Agricultural Policy. Ecological economics, 119, 24-38. https://www.sciencedirect.com/science/article/pii/S092180091500316X

Dedeurwaerdere, T., Olivier De Schutter, Marek Hudon, Erik Mathijs, Bernd Annaert, Tessa Avermaete, Thomas Bleeckx, Charlotte de Callataÿ, Pepijn De Snijder, Paula Fernández-Wulff, Hélène Joachain, Jose-Luis Vivero (2017)."The governance features of social enterprise and social network activities of collective food buying groups". Ecological Economics 140: 123–135. – see annexe 2

Dedeurwaerdere, T., Melindi-Ghidi, P., and Sas, W. (2017). "Networked innovation and coalition formation: the effect of group-based social preferences". *Economics of Innovation and New Technology*, Routledge, pp.1–17, DOI: 10.1080/10438599.2017.1378163 https://www.tandfonline.com/doi/full/10.1080/10438599.2017.1378163

De Schutter, O. (2017). The political economy of food systems reform. European Review of Agricultural Economics, 44(4), 705-731.(see Annexe 2)

Book chapters

Vivero Pol, J.L. (2014). The commons-based international Food Treaty: A legal architecture to sustain a fair and sustainable food transition. In: Collart-Dutilleul, F. & T. Breger, eds. Penser une démocratie alimentaire

Manuscripts under review

Sibylle Bui, Ionara Costa, Olivier de Schutter, Marek Hudon, Tom Dedeurwaerdere, Marlène Feyereisen. 2018 Fostering sustainability transitions through inclusive governance and systemic ethics - insights from an example of local sourcing in Belgian supermarkets. Selected for the special issue "Ethics and sustainable agri-food governance: appraisal and new directions" to be published in Agriculture and Human Values.

See deliverable 4 - short paper - https://sites.uclouvain.be/food4sustain/outcomes

Articles in preparation

Alicia Dipierri, Ecological responsiveness towards a sustainable agri-food sector of for-profit organization in Belgium /

Sibylle Bui, Ionara da Costa, Tjitske-Anna Zwart, Hélène Joachain , "Learning for sustainability transitions : a conceptual framework - the role pf mainstream business organization in the context of niche-regime interaction " –

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10. ANNEXES

-- Workshop report

On the 3rd of May, 2018, the KU Leuven organized an event with stakeholders. The event was organized in collaboration with Rikolto, an NGO based in Leuven that also deals with the topic of bringing more local products into supermarkets. Some of the main questions that were addressed during the conference were:

- Are the marketing and sourcing practices of supermarkets compatible with practices in short supply chain systems and local food systems?
- What are the experiences of retailers, local organisations and local producers with the sourcing and marketing of local goods in large-scale retail?
- Is there a future for short food supply chains in supermarkets?
- Can and should short supply chains be upscaled?

The conference brought together different experts, from supermarkets or otherwise involved in the topic. The was organized in the Provinciehuis, in Leuven, from 8.00-12.00. The program looked as follows:

- 8.00 Welcome with breakfast
- 8.40 Introduction Joris Aertsens (Rikolto) and Tjitske Anna Zwart (KU Leuven)
- 9.00 Testimonies supermarkets and local producers and organisations
 - 1. Jill Soels, Carrefour
 - 2. Niels van Couter, Colruyt Group
 - 3. Daan Vanhorenbeek, Straffe Streek
 - 4. Mario van Hellemont, Fruit producer
- 10.45-11.00 Break
- 11.00 Presentation Tjitske Anna Zwart KU Leuven, sharing some of the Food4Sustainability results
- 11.20 Open dialogue with Jill Soels (Carrefour), Niels van Couter (Colruyt Group), Daan Vanhorenbeek (Straffe Streek), Mario van Hellemont (fruit producer), Patrick Pasgang (Innovation support, Farmers Union)
- 12.00 Lunch

The conference attracted a wide range of participants. A participants list has been added here under

The discussions mainly revolved around the difficulties of sourcing locally in supermarkets, but also some strengths of marketing local food in large scale retail were revealed. There was also a long discussion on the term local, arguing that it is not a black-an-white story, and that it is important to think beyond assumptions on the (un)sustainability of local food, short supply chains, and supermarkets. The retailers also explained their different approaches to the

sourcing and marketing of local food, while the fruit producer and the representative of the local organization explained their experiences of working together with different retailers.

It became clear from the discussions that sourcing and marketing local food in supermarkets is not easy, and that there is not a blueprint on how it should be done. However, the participants discussed openly on the advantages, disadvantages and difficulties (one main difficulty being transport) of offering local goods in large-scale retail and there was an open exchange about experiences and projects and the different angles from producers, an organization for local producers, and retailers provided a deep insight in these issues.

A more detailed report (in Dutch) on the conference can be found here: <u>http://www.vilt.be/lokaal-is-zoveel-meer-dan-kilometers-alleen---lokaal-in-de-supermarkt-kan-dat-wel</u>

Some of the presentations of the participants can be found here: <u>https://www.biosfere.be/korte-keten-congres/</u>

List of Participants

Last name	Name	Organisation
Adams	Nadine	Duroc De Riegel
Aertsens	Joris	Rikolto (Vredeseilanden)
Avermaete	Tessa	KU Leuven
Boeykens	Lothar	FairTradeGemeente
Boudt	Ann	Geïnteresseerde particulier
Boussauw	Sebastiaan	Hogeschool UCLL
De Bauw	Michiel	KU Leuven
de Crombrugghe	Rosalie	Delhaize
De Muynck	Marjan	VLAM
De Preter	Sara	VLAM
De Smet	Eline	Economische Raad voor Oost-Vlaanderen
Delbecque	Hilde	Voedselteams vzw
Engelen	Gert	Rikolto
Goethijn	Lieta	Stad Gent
Hendrickx	Michelle	Voedselteams vzw
Huyghe	Caroline	Rikolto
Kiekens	Cato	UGent
Krabansky	Paul	Delhaize
Lievens	Eewoud	KU Leuven
Maebe	Sigrid	Phytofar
Magits	Anita	Stadskantoor Leuven
Martens	Toon	Bie&Toon VOF
Mathieu	Christine	BELSPO
Mertens	Geert	Provincie Vlaams-Brabant
Moulaert	Michael	VVSG
Nick	François	Boerenbond

Pajko	Aleksandra	Carrefour
Pasgang	Patrick	Innovatiesteunpunt
Philippaerts	Ines	Provincie Vlaams-Brabant, dienst land- en
		tuinbouw
Piret	Lara	The Shift
Roeykens	Eva	provincie Vlaams-Brabant
Soels	Jill	Carrefour
Thoelen	Bart	Steunpunt Hoeveproducten
Thys	Evert	Stad Leuven
Van Couter	Niels	Colruyt Group
Van den Abeele	Lucas	ULB
Van den Eynde	Matthias	Landelijke Gilden
Van der Plaetsen	Michèle	DGD
Van Hellemont	Mario	Fruitteler
Van Hooreweghe	Marieke	VILT vzw
Van Meulder	Liesbeth	Rikolto
Van Outryve	Jacques	Boer&Tuinder
Van Remoortere	Carine	Vormingplus Waas-en-Dender
Van Reusel	Danny	Voedselteams vzw
Van Rillaer	Hilde	Stad Leuven
Vandebroeck	Lien	Boerenbond
Vanderheiden	Erik	Stad Leuven
Vanhorenbeek	Daan	Streekproducten Vlaams-Brabant vzw
Vermeulen	Karel	bio planet Leuven
Verstraeten	Joke	UGent
Wyckaert	Jan	Rikolto
Zwart	Tjitske Anna	KU Leuven
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-- Published articles – book chapter

Dedeurwaerdere, T., Polard, A., & Melindi-Ghidi, P. (2015). The role of network bridging organisations in compensation payments for agri-environmental services under the EU Common Agricultural Policy. Ecological economics, 119, 24-38. *Open access* <u>https://www.sciencedirect.com/science/article/pii/S092180091500316X</u>

Dedeurwaerdere, T., Olivier De Schutter, Marek Hudon, Erik Mathijs, Bernd Annaert,

Tessa Avermaete, Thomas Bleeckx, Charlotte de Callataÿ, Pepijn De Snijder, Paula Fernández-Wulff, Hélène Joachain, Jose-Luis Vivero (2017)."The governance features of social enterprise and social network activities of collective food buying groups". Ecological Economics 140: 123–135.

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