A thesis submitted to the Department of Environmental Sciences and Policy of Central European University in part fulfillment of the Degree of Master of Science

An assessment of the ecological embeddedness of a farmers' market in Hungary
Case study on Szentendre farmers' market

Gábor KIRÁLY

July, 2013

Budapest

Notes on copyright and the ownership of intellectual property rights:

(1) Copyright in text of this thesis rests with the Author. Copies (by any process) either in full, or of extracts, may be made only in accordance with instructions given by the Author and lodged in the Central European University Library. Details may be obtained from the Librarian. This page must form part of any such copies made. Further copies (by any process) of copies made in accordance with such instructions may not be made without the permission (in writing) of the Author.

(2) The ownership of any intellectual property rights which may be described in this thesis is vested in the Central European University, subject to any prior agreement to the contrary, and may not be made available for use by third parties without the written permission of the University, which will prescribe the terms and conditions of any such agreement.

(3) For bibliographic and reference purposes this thesis should be referred to as:

Király, G. 2013. An assessment of the ecological embeddedness of a farmers' market in Hungary. Master of Science thesis, Central European University, Budapest.

Further information on the conditions under which disclosures and exploitation may take place is available from the Head of the Department of Environmental Sciences and Policy, Central European University.

Author's declaration

No portion of the work referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

Gabor KIRÁLY

CENTRAL EUROPEAN UNIVERSITY

ABSTRACT OF THESIS submitted by:
Gábor KIRÁLY
for the degree of Master of Science and entitled: An assessment of the ecological embeddedness of a farmers' market in Hungary
Month and Year of submission: July, 2013.

Modern food production has been disembedded form its local context in conventional food production systems. As a result of this development, food production and consumption have become also disconnected. Agro-food studies have been interested in understanding this disconnection tendency and have researched the possibilities to re-establish the relationship between these two essential actors of food supply chains. Therefore, focus of agro-food scholars has shifted to alternative and local food systems in order to explore their reconfiguring potential. To this end, there has been a conceptual and operational framework developed aiming to link ecological conditions of food production and food exchange within an analytical and descriptive approach, called ecological embeddedness. This research project attempts to apply this novel way of presenting the relationship between food producers and consumers to the development and operation of a Hungarian local food system. Accordingly, this thesis explores the ecological embeddedness of Szentendre farmers' market within the framework of an ethnographic case study using qualitative data collection methods. The author concludes that even though ecological embeddedness has limited explanatory relevance in this individual case, the market shows great potential to be the place of the reconfiguration of the relationship between food producers and consumers.

Keywords: agriculture, direct sales, local food systems, alternative food systems, farmers' market, ecological embeddedness

Table of Contents

INTRODUCTION **1**

CHAPTER 1 INTRODUCTION OF RELEVANT ACADEMIC AGRO-FOOD DISCOURSES, FIELDS, CONCEPTS **4**

1.1 Introduction **4**

1.2. System level discourse of this research **4**

1.3. Definitions of the relevant fields of this thesis **13**
2.3.1. Agro-food studies 13
2.3.2. Studies on alternative food networks 14
2.3.3. Studies on local food systems 15

1.4. Conceptualization of farmers' market **19**

1. 5. Introducing ecological embeddedness **22**
1. 5. 1. The roots of embeddedness discourse 23
1. 5. 2. Social embeddedness 25
2. 5. 3. Spatial embeddedness 26
2. 5. 4. Ecological embeddedness 27

CHAPTER 2 INTRODUCTION TO DATA COLLECTION METHODS **36**

2. 1. Overall research design **36**

2. 2. Methods of data collection **37**

CHAPTER 3 THE LAST 25 YEARS IN THE HUNGARIAN AGRICULTURE AND FOOD SECTOR **44**

CHAPTER 4 ETHNOGRAPHIC DESCRIPTION OF SZENTENDRE MARKET AND CONTRASTING REVIEWED CONCEPTS **53**

CHAPTER 5: ECOLOGICAL EMBEDDEDNESS THROUGH UNDERSTANDING AND REALIZING DIMENSIONS **64**

5. 1. Introduction **64**

5. 2. Understanding on-farm ecological relations and conditions **65**
5. 2. 1. Intrinsic vs instrumental values of nature 67

5. 3. Realizing on-farm ecological relations and conditions **73**
5. 3. 1. Land management practices 74
5. 3. 2. Selection of seeds 77
5. 3. 3. Use of inputs 81
5. 3. 4. Perception of institutional environment 85

5. 4. Comparison of two distinct farming activities 89
5. 4. 1. An apicultural ecology 90
5. 4. 2. An over-controlled dairy farm 94

CHAPTER 6 PRESENTATION OF ECOLOGICAL EMBEDDEDNESS THROUGH UTILIZING AND NEGOTIATING DIMENSIONS 100

6. 1. Introduction 100

6. 2. Utilizing the ecology of food production systems 101
6. 2. 1. Promotional and marketing materials of farmers 101
6. 2. 2 .Customers' frequently asked questions from vendors 103
6. 2. 3. Elements of vendors' strategy to get customers' attention 107
6. 2. 4 .Relationship between eating qualities and ecology of production 108

6. 3. Negotiating the ecology of food production systems 109
6. 3. 1. Brief demographic outlook of customers 111
6. 3. 2. Motivations, preferences and choices of customers at Szentendre farmers' market 113

CONCLUSION 119

APPENDIX 123

REFERENCE LIST 124

Introduction

The development and operation of modern food systems have received miscellaneous interests from a vast array of sciences. Among many other approaches, agro-food scholars have attached a great significance to disembedding tendencies in realization of the de-connection between producers and consumers. This special interest has been mostly expressed towards alternative and local systems as they have the potential to challenge the dominant food production schemes by giving new meaning to the relationship between producers and customers. Examining these food phenomena from very different points of views has resulted in an extraordinary diverse and still growing body of literature. It is still growing in the sense that new approaches have kept emerging continually, enriching our deep knowledge of these systems.

Agro food scholars have developed a vast amount of approaches to study local or alternative food systems in the context of the mainstream producing, trading and distributing principles dominating global and disembedding local agro-food relations (IAASTD 2009) (IPTS 2013) (SCAR 2011) (2006) (Windfuhr and Josén 2005). Great efforts have been made to explore and show that local or alternative food systems embody spaces where production and consumption can find each other challenging conventional food systems (Venn et al 2006). A recent effort to see the reconfiguring potential of local or alternative food systems through a new analytic dimension is the concept of ecological embeddedness. This approach has been conceptualized in order to understand the influence of on-going ecological relations on the production, exchange and consumption (Morris and Kirwan 2011a).

Far too little attention has been paid to the concept of ecological embeddedness in academic agro-food discourse. On the one hand, this lack of relevant academic literature caused some difficulties since results could not be compared to the conclusions of former research projects. However, on the other hand, it gave an exciting opportunity to contribute to the development of this growing theory.

The concept of ecological embeddedness is based on the fact that food production must be grounded on nature, meaning that it must be ecologically embedded to a certain extent (Murdoch, Marsden and Banks 2000). The primary objective of this concept is to reveal that alternative food systems are naturally or ecologically embedded, which might affect the development and operation of these food systems. Applying this concept to a Hungarian farmers' market is the purpose of this research in the hope to further develop this novel concept with relevant empirical findings. To this end, Szentendre farmers' market was selected as the location of this research. In justification of the selection, , it needs to be emphasized that any similar research project has not been conducted in Hungary meaning that

there was no any reference point to compare to the outcomes of this project. This lack of literature made the selection allowable because the location of the first application of this novel concept was considered as a valid and justified decision, wherever it takes place.

Accordingly, the objectives of this research have been formulated to broaden out the concept of ecological embeddedness. *The central objective to accomplish is to see whether this concept can be relevant in the Hungarian food sector, especially in the context of a farmers' market. Beyond studying relevance, the major focus will fall on the relationship between food producers and consumers in order to see whether a farmers' market can be the scene of reconnection and whether this reconnection can be explained by the analytic and descriptive tools of ecological embeddedness*. Furthermore, this project will meet further subsidiary objectives too. Following recent suggestion (Kirwan and Morris 2011a) for the operationalisations of research projects led by empirical interest in ecological embeddedness, it is aimed to get a sense of perspective from both the producers and the consumers' side by going through the ecological dimensions of this food system. In accordance with the general purpose of this research, it is intended to provide an ethnographic description of a local and alternative food system in order to view this food phenomenon in a broader context. To this end, Szentendre farmers' market was selected

Six major subdivisions constitute the structure of this thesis and they are outlined as follows. It begins with a comprehensive literature review including the introduction of the theoretical framework, such as relevant discourse, fields and concepts. This section will review the direction of future agro-food initiatives, the interconnectedness of alternative and local food systems and farmers' markets and the evolution of ecological embeddedness. This will be followed by a section on the methodology of the project presenting the primary data collection methods, such as participant observations, interviews and dot-voting survey. Then, a brief historical review will present the major trends, developments and turning points in the last decades of the Hungarian agriculture and food sector. In the pages that follow, three substantial chapters will serve as combinations of separate findings and discussion sections as results and analysis will be presented together. Firstly, a detailed, ethnographic description of Szentendre farmers' market will be contrasted with the reviewed academic concepts. Secondly, the examination on the understanding and realizing dimensions of ecological embeddedness will be carried out. Thirdly, the focus will shift to the utilizing and negotiating dimensions in order to capture the essence of ecological embeddedness of Szentendre farmers' market.

With regards to the nature of this project, it is defined as an analytic case study underpinned by ethnographic observations. As a case study, this project will refer to Szentendre farmers' market as an individual example of a food system, while ethnographic observations will support the detailed

discussion. Additionally, this field research based project was essentially based on qualitative research methods.

Chapter 1 Introduction of relevant academic agro-food discourses, fields, concepts

1.1 Introduction

Literature review will be divided into 3 separate, but strongly interconnected sections as Figure 1 illustrates. This division aims to go through the theoretical framework of this research by approaching the major points from the broadest towards the narrowest aspects. Accordingly, system level discourse will be presented firstly then, relevant fields, such as agro-food studies, local food systems, alternative food networks will be examined and lastly, there will be given an overview on the development of the concept of ecological embeddedness.

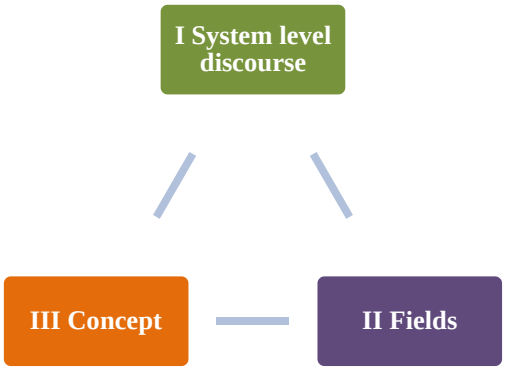

Figure 1 Structural imagination of the literature review

1.2. System level discourse of this research

Defining the discourse to which the author aims to contribute is a crucial part of any literature review. However, the identification of the relevant academic narrative often happens as a part of the general literature review without any specified definition of the discourse. In this research, the first section will provide a comprehensive review of recent findings and

statements on agro-food systems from a system level perspective. These are meant to mark out a broad narrative of agro-food studies that will be hopefully enriched by this research.

These four recent interpretations on agro-food issues are used to furnish the literature review with a system level perspective. The Millennium Ecosystem Assessment (2005) provides an understanding of how food production and consumption generate impacts on ecosystems (MEA 2005). The second one, the sufficiency narrative was developed by the Standing Committee on Agricultural Research (2011) with the aim to summarize the visions of a desired transition towards a new agriculture (SCAR 2011). Following up this new agriculture, multifunctionality has been brought into the discourse as the recognition of the multiple functionality and complexity of agriculture in general (IASSTD 2009). Finally, the concept of food sovereignty will serve as a capstone of this part of the literature review because there is no other more universal approach to current food system concerns than human right based food sovereignty.

The Millennium Ecosystem Assessment (2005) evaluates how food systems influence ecosystems. Drivers have been defined playing significant roles in the future state of ecosystem services, which support agricultural activities and food production. *Population growth* will challenge achieving global food security in the near future. *Natural resources* have been used far the most intensively by agriculture and food production resulting in declines and the degradation in arable lands and available water to irrigate. Conservation *agrobiodiversity* is crucial because gene pools enable the easier adaptation to future ecological circumstances and conditions. This leads to the next driver, *climate change and extreme events* which has a significant influence on both food consumption and production. It

has been predicted that impacts may affect food systems differently in terms of vulnerability, sensitivity and adaptability (MEA 2005).

The Millennium Ecosystem Assessment (2005) comes to the conclusion that greater agroecological and socio-economical assessment and knowledge must be the basis of future food production and consumption system. They both must be environmentally, economically and socially beneficial and sustainable, while they provide reasonable choices of healthy and nutritious food products. Achievements of the Green Revolution are unquestionable regarding the unprecedented growth in yields which has prevented the developing world from falling in starvation and famine.

However, the challenges of future food provision require new approaches in agro-food studies. The *responsible use of science* is always expected but in the 21st century, the increasing importance of the issue of agro-biotechnology will make the scientific community consider ethical, social and last but not least, human health aspects. Greater accessibility to *information and communication tools* will help agricultural scientists in harmonizing diverse research efforts. The i*ntegration of ecology and socioeconomy* marks out the domain that should be involved by future agricultural research with an attentive focus on the best available choices at each level of food economy (MEA 2005). In conclusion, the Chapter on Food and ecosystems in the Millennium Ecosystem Assessment (2005) broadly marks out the direction of future research on food systems which are desired to advance towards enhancing the sustainability of food production and consumption. These research efforts may serve to encourage the transition towards more sustainable food systems.

A report conducted by the Standing Committee on Agricultural Research (2011) somewhat undertakes this task when it summarizes two dominating narratives, the productivity and sufficiency narratives on agro-food discourses. While the report assesses the scenarios of possible transitions towards future agricultural and food systems assuming that these systems are likely to have to operate in a world with less and degraded resources in the future. The report introduces a pair of narratives stating that foresight studies usually provide different narratives to communicate certain paradigms, worldviews or discourses. In the case of SCAR's report, two narratives have been defined in order to describe two opposing discourses. Both the sufficiency and productivity narratives aim at challenging the common concerns about failing to meet global food demand by 2050. Presenting both will help understand the core contrast between these two distinct worldviews, even though the conceptual framework of this thesis is rather in line with the sufficiency narrative only.

Within the *productivity narrative,* solutions are based on scientifically enhanced productivity growth as the focus falls on further investments in research and development. The productivity narrative looks at agricultural development as a long series of revolutions advancing towards a higher level of mechanization, intensification and gene manipulation. Environmental degradation and social inequalities as possible results of the growth based paradigm are handled than as inevitable constrains rather parts of a greater complexity. It assumes that the intensification and increasing use of inputs can mitigate natural ecosystems being turned to crop lands (SCAR 2011).

In a sharp contrast to the productivity narrative, the sufficiency narrative embodies the language to which this thesis aims to belong. Within the sufficiency narrative, limits to grow receive attention in parallel with necessary behavioral and structural changes in food practices

such as overconsumption, waste generation and ecosystem destruction. Those who share these views have a strong belief in managing ecosystems respectfully, saving resources for future generation and internalizing externalities into market prices in the name of sufficiency (SCAR 2011). The core difference between the productivity and sufficiency narratives is framed by the Committee as follows: *"The paradigm of maximisation is replaced by the paradigm of sufficiency"* (SCAR 2011 20).

Moreover, the sufficiency narrative is holistic in its nature, which plays a necessary role in understanding and realizing the complexity of food systems. Complexity is considered to be in line with multifunctionality, which has become an effective concept to describe the interconnected environmental, social and economic functions and roles. Hence, multifunctionality as the nature of agriculture is the third element of the system level perspective of this literature review.

Multifunctionality as the nature of agriculture has been recognized and interpreted by the International Assessment of Agricultural Knowledge Technology and Development (2009). The multifunctional perspective of agricultural knowledge, science and technology has been assigned to the great challenge of meeting the UN Millennium Development Goals, namely *"reduction of hunger and poverty, the improvement of rural livelihoods and human health, and facilitating equitable, socially, environmentally and economically sustainable development"* (IAASTD 2009 3). The assessment provides several options for acting on behalf of the visions of multifunctional agriculture. These options, for instance, suggest increasing the strength of agroecological sciences, the greater involvement of women, the sound and innovative combination of formal, traditional and community based knowledge, innovative institutions with the capability to address ecological challenges.

The magnitude of multifunctionality becomes clearly understandable in opposition to dominant agricultural principles. These are perfectly summarized in the words of the UK Food Group (2010): "the dominant industrial agricultural, livestock and fisheries system of industrialized countries, and their footprint on the rest of the world, is made up of a narrow and scientifically reductionist package of production technologies and practices, a global system of trade based on a liberal economic philosophy, which puts profits from commodity trading before food for people, and an increasing concentration of ownership and control by powerful corporations" (UK Food Group 2010 3). In this thesis, the „narrow and scientifically reductionist package of production technologies and practices" (UK Food Group 2010 3) requires greater attention since farmers' markets go far beyond this approach and promote the diversity of practices at every level of local food systems.

Food sovereignty constitutes the fourth element of the system level perspective of the literature review. Food sovereignty is broadly defined as a *"counter-proposal to the mainstream development paradigm built on liberalized international agricultural trade, trade-based food security, and industrial agriculture and food production by well-resourced producers"* (Windfuhr and Josén 2005 1). It provides a substantial message and legal binder to address the problems of the current food system in one comprehensive framework.

The concept of food sovereignty was brought into the world by a proposal of Via Campesina in 1996 (Via Campesina 1996). As their statement came out responding to the World Food Summit in Rome, food sovereignty broke new ground for a novel and unquestionable rightful way of thinking of food and agriculture issues. The most recent definition of food sovereignty states that "Food sovereignty is the right of people to healthy and culturally appropriate food

produced through ecologically sound and sustainable methods, and their right to define their own food and agricultural systems (…)" (Nyéléni 2007).

Beyond the definition, the food sovereignty concept embraces a whole policy framework of principles and recommendations aiming to ensure people's sovereign access to their own food decisions. The birth of food sovereignty in the early 1990s coincided with the realization of problems in the operation of global food systems. Accordingly, several issues may constitute the context of the development of food sovereignty (Windfuhr and Josén 2005). *Global hunger and malnutrition* have been highlighted as a fierce proof of unevenly distributed food resources, which has been explained by a set of political decisions which neglected and exacerbated these issues at the same time. *Limitations of technical solutions* have been an argument for the realization that agricultural systems operate in ecological systems whose limits cannot be expanded to infinity. Beyond technical constraints, national and international *policy constraints* and *market distortions* have played a significant role in neglecting the interrelations between rural development and agricultural production by implementing neoliberal economic instruments, such as opening-up agricultural markets for agricultural import and subsidizing agricultural exports. The *industrialization of agriculture* has brought the attention to threats posing by overusing of resources such as water and soil, the degradation of traditional knowledge and intensified practices. Last but not least, *corporate control* has been considered as the concentration of trans-national agricultural and food corporate interests over entire food supply chains, which definitely reduces the possibilities of people to make their sovereign food decisions (Windfuhr and Josén 2005).

As a reflection to these issues, Via Campesina developed 7 principles to succeed the food sovereignty movement. (1) The f*ood is a basic human right* which is rooted in the most

quoted element of the concept that is "everyone must have access safe, nutritious and culturally appropriate food in sufficient quantity and quality to sustain a healthy life with full human dignity" (Windfuhr and Josén 2005). (2) *An agrarian reform* is needed which would ensure poor and landless people that they have access to land regardless of their "gender, religion, race, social class or ideology" (Windfuhr and Josén 2005). (3) Food sovereignty movement strenuously voice the importance of protecting natural resources, such as land, water and livestock breeds, which are crucial for agro-ecosystems. (4) The principle of *reorganizing trade emphasizes* that primarily food is to fulfill domestic nutritious needs, preferably within the self-sufficient production. Food trade in the future must be based on fair business instead of exploiting those who are exposed the most to the distorted global market forces. (5) In order to *combat the globalization of hunger*, there is an urgent need for global acts, such as a Code of Conduct for transnational corporations to exclude speculative interests from the global agriculture trade. (6) The Food Sovereignty movement calls for a greater attention to *peaceful, equal, non-discriminative social development*. (7) Democratic values represent the last principle of Food Sovereignty, however promoting rights to participate in decision making, access information and for accountability is at least as important as the former ones (Windfhr and Josén 2005) (Nyeleni 2011).

Presentation of these four different approaches to agro-food system has clearly marked out that broad discourse which is meant to serve as a system level background to this research. These statements have been considered as aspects that must be addressed in a research which aims to contribute to the academic discourse on agro-food issues. Each of these statements has their own role to support the construction of the system level discourse. The *Millennium Ecosystem Assessment* (2005) shows a direction to future research initiatives to follow within the joint realm of agriculture, agroecology, social sciences, environmental sciences and

economy. This responsible, ecologically sustainable and accessible approach must be the common lowest common denominator in national or international effort to respond to current and up-coming challenges in relation to food and ecosystems. The Standing Committee on Agricultural Research (2011) has a report supporting this direction by working out transitions pathways towards future food systems which must be based on sustainable production and consumption. This report finds this transition feasible and desirable by applying the *sufficiency narrative* which put emphasis on the importance of behavioral and structural changes in food systems. In my point of view, any research project that aims to deepen our understanding of producers and consumers relation, like this belongs to the sufficiency narrative (SCAR 2011). The following element of the system level discourse is the vision of multifunctional agriculture which is the dawning realization of various roles and functions of agriculture (IAASTD 2009). Accordingly, this research supports multifunctional approach both from producers and consumers' side because multifunctional agricultural definitely benefits both sides. Last, but not least food sovereignty is supposed to represent a simple but universal paradigm ensuring that food is a basic human right. This legal binder is considered as a proposal that involves everybody in food supply chains without an exception, therefore it also must be also voiced in this research.

Turning to the next section of the literature review, relevant fields such as agro-food studies, alternative food networks, local food studies and farmers' markets will be presented in order to describe a narrower context for this research.

1.3. Definitions of the relevant fields of this thesis

The identification of the fields of this thesis is structured as follows: *studies on farmers' markets* usually are part of a broader *field of local food systems*. These research initiatives aim to understand local food schemes which are considered as a subfield of alternative food network studies. Finally, locating the thesis at the broadest conceptual level, *alternative food networks* research accounts for an increasingly important area within *agro food studies*. Figure 2 shows the interrelation of the relevant fields of this thesis, presenting a clear approach to the subject of my research:

Figure 2 Structural imagination of academic concepts involved in the research

Generally speaking, this thesis aims to contribute to the field of agro-food studies by looking at the development of a Hungarian farmers' market through the point of view of ecological embeddedness. After having a general look at these fields, it might be beneficial if better explained descriptions of each field are provided in order to strengthen the conceptual framework of my work.

1.3.1. Agro-food studies

In the broadest sense, agro-food studies are defined as a multi-disciplinary concern about *agro-food systems*, including issues from the entire food supply chain. Research efforts within agro-food studies have been responding to the rising challenges of the agro-food sector. The European Union specifies the priorities of the European agro-food research as follows: "Food security, sustainable agriculture, marine and maritime research and the bioeconomy" (Ciolos

and Geoghagen-Quinn 2013 4). These broadly defined priorities obviously enhance a wide range of research efforts resulting in diverse interests being apparent both within the area of the European Agriculture and Rural Development and the European Research, Science and Innovation (Ciolos and Geoghagen-Quinn 2013).

1.3.2. Studies on alternative food networks

Studies on *alternative food networks* (AFN) represent rising concerns within the discourse on agro-food systems. The most obvious sign, as Venn et al (2006) point out, is that relatively high number of papers (56) has been published on these food initiatives since 2000. The authors conduct a review of theoretical and conceptual papers all based on case studies in order to provide a comprehensive conceptualization of the alternative food networks. Grounding on their in-depth overview, one can conclude that studies on alternative food networks embody a diverse discipline with growing popularity but highly driven by individual cases on producer consumer relations. This analysis touches upon more or less the following descriptions of alternativeness: socially and geographically embedded (Collet and Mormont 2003), ethical consideration of carefulness (Holloway and Kneafsey 2004), resocializing and respatilizing food relations (Marsden et al 2000), quality food production and local ecologies (Murdoch, Marsden and Banks 2000), new food supply chain configurations (Renting 2003), production systems grounded on territory (Sage 2003), reforming farmers, consumers, animals' relations (Stassart and Whatmore 2003) and post –productivism and quality production (Wiskerke 2003). Table 1 summarizes the academic discourse upon alternative food networks as Venn et al (2006) understand them from their case study review.

Academic discourse and interpretation				
Reconnection and re-embeddedness of producers, consumers,	Corporately controlled food chains organized through non-conventional channels	Social embeddedness concerning with trust and community	Quality in realtion to traditions and heritage	Lifestyle programs

Table 1 Summary of academic interpretations on alternative food networks (Venn et al 2006)

This summary clearly shows that alternative food networks can be accurately described by wide range of notions, however, one clear definition might contribute more effectively to this theoretical framework. Relying only on this consideration, Kirwan's (2004) approach could serve the aim to frame these initiatives into one definition as it seems to go deep enough to capture the essential core of alternative food systems: "Inherent within these AS is often a deliberate intention to create alterity (or otherness) in the food system and to produce change in the 'modes of connectivity' between the production and consumption of food, generally through reconnecting food to the social, cultural and environmental context of its production" (Kirwan 2004 395). Even though Venn et al (2006) note overusing the term 'alternative' to describe non-conventional food systems might result in weakening "the depth and diversity of this growing sector and does not do credit to the array of creative/innovative relationships orchestrated through new consumer-producer partnerships" (Venn et al 2006 256). After having a brief look at the conception of alternative food networks, the following section will go through local food system as a specialized case of alternative ones.

1.3.3. Studies on local food systems

The last part of this section is to introduce the field of *local food systems* as the concrete domain of farmers' market. The bridge between alternative and local food studies is made by Blay-Palmer (2008) pointing to locality as a recently incorporated notion into Alternative

Food System studies. She considers this addition to "help understand the ordination and interrelationship of food production vis a vis local consumers, international markets, and regulatory regimes among the gamut of influences" (Bay-Palmer 2008 82). The Institute for Prospective Technological Studies (2013), one of the research centers of the European Commission, clearly specifies the frames of local food systems: "a local food system is one in which foods are produced, processed and retailed within a defined geographical area" (IPTS 2013 28). This definition slightly touches upon the issue of traceability and the origin of food produces; however the report points out that the locality or scale of a certain food system is completely context-dependent. Criteria usually determine a radius of a certain food source within that food produces can be sold as local. Moreover, the report goes further and introduces the term, *Short Food Supply Chain* as a more specified concept of local food systems in terms of being more focused on the "nature of the relationship between producer and consumer" (IPTS 2013 31). The report differentiates between these two concepts, however differences are so slight that the authors keep referring to them rather as almost synonyms than distinct concepts (IPTS 2013). Beyond providing an adequate definition of local food systems, the report overviews this phenomenon in-depth which makes it an excellent source to ground on in the rest of this section.

Local Food Systems and Short Food Supply Chains embrace a wide range of variations according to their profiles. Classifications make a difference between *Community Supported Agriculture*, *On farm sales* (farms shops, farm based hospitality, roadside sales); *Off farm sales – commercial sectors* (farmers markets, food festivals, buying groups), *Off farm sales – catering sector, public procurement* (sales to hospitals or schools); *Farm Direct Deliveries in proximity*; *Farm direct deliveries at a distance* (internet sales) (IPTS 2013). As they appear to

satisfy a complex demand for locally produced food, they also generate complex impacts on society, economy and environment (IPTS 2013).

The IPTS (2013) report provides a comprehensive overview of studies on social, economic and environmental impacts of Local Food Systems. Social impacts usually include less tangible developments within a certain community. Regular meetings of producers and consumers are described as exclusive relationships which evidently generate trust and social embeddedness (Sinnreich 2007) (Sage 2003) (Hendrickson and Hefferman 2002); however these social benefits appear as secondary motivation in the consumers' choice of purchasing food within such a scheme (Kirwan 2004) (Murphy 2011).

There has been a few evidences showing that farming, growing, producing and eating in a sense of shared or communal way have a great potential to build communities and raise social concerns about food issues (Hayden and Buck 2012) (DeLind 2011) (Milestad et al 2010). Beyond what consumers can learn about certain food produces and producing practices, consumers might be changing the way of their food consumption while paying more attention to locality, seasonality and health issues (Saltmarsh et al 2011).

In terms of economic impacts (IPTS 2013), contributions of Local Food Systems are classified as follows. They can boost rural development by increasing the value of local landscape, species, traditions, knowledge (Du Puis and Goodman 2005). Shorter food supply chains may result in the increased number of food purchasing occasions, which can stimulate local business. Obviously, a more dynamic local economy requires more people to work, which leads to an increased local employment (Otto and Varner 2005). Local Food Systems

attract tourists to plan their holidays according to the available local food and gastronomy opportunities (Pearson et al 2011).

Another type of economic benefits is the one that is being realized on farms and becoming tangible increased income or profit (IPTS 2013). Direct marketing brings a great advantage to farmers since they can exclude middleman from the picture. The higher income and fair prices have been proved to play an important role in participating in short supply chains (Lawson 2008). In addition, small scale farmers often rely on family labor which can result in minimizing producing cost and maximizing economic gains (Broderick et al 2011). Beside the beneficial impacts, it must be remarked that small-scale – direct selling farmers in any local food schemes have to be provident in financial planning (Hinrichs 2000, Jarosz 2008) brings in an interesting finding about farmers rather enjoying selling at local markets than purely focusing on utilizing financially from such events (Jarosz 2008).

Last but not least, studying the environmental impacts of Local Food Systems and Short Food Supply Chains has been a focal point of alternative food network studies for a long a time. The review of some relevant articles shows that the picture is not always clearly black and white in favor of relocalized food systems (IPTS 2013).One of the common beliefs regarding beneficial environmental impacts of LFS is that food produces need to be transported in a shorter distance, which results in less food miles and in this way, smaller carbon footprint (IPTS 2013) (Seyfang 2008). However, Edwards-Jones *et al* (2008) and Coley *et al* (2011) come to the same conclusion arguing that the "totemic concept of food miles" (Coley et al 2011 931) is not a sufficient indicator to evaluate the environmental efficiency of certain local food systems. Focusing only on transportation distances between production and consumption has distracted the attention of agro-food scholars from other elements of food supply chains.

What they agree on is that Life Cycle Assessments (LCA) could replace the over-discussed food mile indicator because LCA could cover entire food supply chains providing a comprehensive picture of all environmentally affecting factors.

The authors of the IPTS report (2013) admit that both LFSs and SFSCs have become the integral part of agro-food systems. Studying these schemes, they remark that since the initial boost in research in the early 2000s, focuses have been shifting from comparative and conceptual works towards small case studies. However, recently there have been research initiatives with novel approaches, such as the development of "trusting relationships between producers and consumers", "understanding of food, farming and environmental issues" (IPTS 2013 53). Relying on this conclusion, I believe that my thesis research aim will fit well this revival interest of local food systems. However, in order to have a satisfactory review of relevant concepts, system views and publications to frame this research, further steps are needed at this stage of the thesis.

1.4. Conceptualization of farmers' market

In order to capture the notion of farmers' market, it is necessary to provide a comprehensive definition of this form of food exchange. In their thematic literature review, Hergesheimer and Kennedy (2010) identify farmers' markets as a form of food exchange which has been evolving since people started cultivating land. The reinvention of farmers' market has been strongly linked to alternative food movements and has captured the attention of social scientists, economists and food geographers producing an extensive amount of literature (Connel et al 2008) (Halloway and Kneafsey 2000) (Hergesheimer and Kennedy 2010) (Hinrichs 2000) (Kirwan 2006) (La Trobe 2001) (Lyon et al 2008) (Milestad 2010) (Moore 2006). Accordingly, this section will borrow two ways of defining farmers' market from

recent papers and then it will briefly review a few concepts (*direct sales, understanding farmer and customer's interactions, learning opportunities and good food choice*), which have been used in order to demonstrate the complexity of this food exchange phenomenon. This will make it feasible to portray "Szentendre market" by comparing it to these different descriptions of farmers' market in Chapter 4.

Recent papers on farmers' markets have defined these meetings in various ways. La Trobe (2001) gives a clear definition as she describes this phenomenon: "farmers' markets are characterized by the selling of foods and other items directly to the customer by the person who grew, reared or produced the goods" (La Trobe 2001 182). Similarly, Halloway and Kneafsey characterize this in a more detailed way: "FMs (farmers' market) in the UK are specialist markets trading in 'locally produced' products, focusing largely on food (rather than crafts, for example) which is either locally grown or incorporates locally grown ingredients" (Halloway and Kneafsey 2000 286).

Academic conversation about farmers' markets has attempted to explore various elements of this food exchanging phenomenon. Reviewing a few of these efforts will enrich the perspective of this research in terms of understanding the complexity of farmers' markets. Perhaps the most important and most frequent notion regarding farmers' market is the direct selling of food produce. Together with *Community Supported Agriculture*, farmers' markets have been often interpreted as a form of direct agricultural markets: "direct agricultural markets promise human connection at the place where production and consumption of food converge, an experience not available either to consumers shopping at "superstores" or "hypermarkets" or to farmers selling through conventional wholesale commodity markets" (Hinrichs 2000 295). Furthermore, non-commercial aspects have not been given enough

attention as Kirwan (2006) says in his seminal article. Utilizing the *convention theory*, he claims that "the producers and consumers concerned are engaging in face to- face interaction in order to create conventions of exchange which incorporate spatial and social relationships that can replace 'uniform standards' with individualised judgement, thereby helping to overcome uncertainty" (Kirwan 2006 303). In the study of Milestad et al (2010) the focus falls on farmers' markets, in the sense of places with a considerable potential for *enhancing adaptive capacity and building social-ecological resilience* through interactions between producers and consumers. The results of their examination suggest that "when farmers and customers use interactions at farmers' markets to revise prior interpretations (or make new ones) about, for example, each other, food, and farming conditions, they gain a better understanding of the complexity of the food system and its context" (Milestad et al 2010 29). Connel et al (2008) makes an interesting contribution to the discourse of farmers' markets by showing an insight into the interconnectedness of farmers' market *and good food choice*. This novel approach leads them to conclude that "a farmers' market can be seen as not only a place to buy "good food" but also as a medium for expressing values associated with food choices" (Connel et al 2008 182). Beyond what has been mentioned above, it is worth highlighting that farmers' markets embody places for social activity, direct and indirect quantifiable economic benefits to the local economy and human capital and business self confidence development of vendors.

To sum up this brief overview of definitions of recent literature on farmers' markets, Hergesheimer and Kennedy's (2010) words seem to be the most picturesque summary of farmers' market. They underline three key elements: direct relationship between producers and customers, regularity of markets and the freshness, localness and quality of food produce. These three elements succinctly summarize what is expected to see in a research on farmers'

market. Later, in Chapter 4, Szentendre market will be contrasted with these approaches in order to try to locate this case in the academic conversation about farmers' markets.

1. 5. Introducing ecological embeddedness

Embeddedness has raised the attention of agro-food scholars since alternative food networks emerged as a fundamental subfield in agro-food studies. Sonnino and Marsden (2006) conclude that alternative food system studies have covered a diverse range of notions and dimensions; however, they have raised issues around the clarification of analytical tools to use in such research projects. They do not just name embeddedness studies as a recommended analytical tool to research alternative food networks, but they suggest to build this missing analytical framework from the „disciplinary realms of economic geography and rural sociology" (Sonnino and Marsden 2006 187) by giving hints for further research efforts. Interpretations on analyzing alternative food networks by applying the concept of embeddedness have been rooted in various interests (Hinrichs 2000) (Kirwan 2004) (Morris and Kirwan 2010, 2011a, 2011b) (Murdoch et al 2000) (Winter 2003). What has become clear after reviewing the relevant literature on this discourse is the straightforward, although intermittently criticized and at some point, unclear development of this analytical branch of local food studies. Therefore, the last section of this literature review is dedicated to presenting a comprehensive review of the concept of embeddedness in the research agenda of alternative food networks. Revealing the theoretical roots of embeddedness comes first, which will be followed by an overview of social and spatial embeddedness continuing the conceptualization process. This will prepare the field for the introduction of the core concept of this thesis, which is the ecological embeddedness.

1. 5. 1. The roots of embeddedness discourse

To define the origin of embeddedness, Karl Polanyi's classical work (1957) needs to be revised. In his best-known piece, in The Great Transformation (1957) he argued for a reformed economic planning, grounded on the rejection of the purely liberal free market paradigm, but turning more towards a planned socialist economy (Humphreys 1969). The most applied point of The Great Transformation is his proposal regarding how to study economic life by relying on three institutional patterns, which are reciprocity, redistribution and market economy. While examining the role of these institutions in the development of economic history, he sowed the seeds of the concept of embeddedness by stating that "instead of economy being embedded in social relations, social relations are embedded in the economic system" (Polányi 1957 57). According to his argument, modern market has become *disembedded* as a result of dominance of self-regulated and self-interested control in modern market economies. Nevertheless, he argues that economy is historically subordinated by the purpose of "safeguarding his social standing, his social claims, his social assets" (Polányi 1957 46).

Mark Granovetter's contribution to the discourse of embeddedness is at least as important as Polanyi's; however, their approaches differ on a significant point. While Polanyi argues for the historical development of disembeddedness of economy in modern societies, Granovetter (1985) emphasizes that behaviors and institutions do not constitute a separate or disembedded domains. In other words, his main argument is that the capitalist economy is embedded in ongoing social relations and extensive network of social relations (Granovetter 1985). As Swedberg (1991) admits, Granovetter brings a new impetus into economic sociology by providing "a sophisticated and elegant argument for the use of networks in the analysis of economy" (Swedberg 1991 268). Granovetter's article opened up a whole new domain for

sociologists in the realm of economy as his novel network approach gives the reference point to study the development of trust in economic activities (Svedberg 1991).

As local food system research efforts started carving their niches in agro food studies in the early 2000s (IPTS 2013), both Polanyi and Granovettwer's works have made a great influence on the research agenda of agro-food studies. Beyond *embeddedness*, another concept, the *quality turn* emerged as well with the promise of providing answers to the critical attention that has been raised towards industrialized food production, standardized food distribution and consumption. These two concepts have been applied for the first time in the interpretation of Murdoch et al (2000), as new theoretical tools to lay the foundation of a new alternative geography of food (Murdoch et al 2000). As they point out, the *quality turn* is rooted in a notion suggesting that sources of local and natural food may be intact agro-ecosystems which are still devoid of any impacts of food industrialization and homogenization. Public concern about food quality based on recent food quality scandals has made consumers turn to these secure food sources. Embeddedness comes into the picture as Murdoch et al identify the concept as follows: "complex interrelations between nature and society in this economic arena" (Murdoch 2000 116). Clarifying the relation between early research interests in quality turn and embeddedness, one could say that local food systems are made up quality food producers rooted in local ecosystem and social structure (Murdoch et al 2000).

Grounding on the article of Murdoch et al (2000), Michael Penker (2006) summarizes the literature on embeddedness in agro-food studies with an emphasized focus on food chain studies. He sees "intrinsically ambivalent, contingent and dynamic" (Penker 2006 369) how the embeddedness discourse has set up a separate research agenda to study food sector

activities. In order to revise this loosely structured discourse, Penker distinguishes social, spatial and ecological embeddedness (Penker 2003).

1. 5. 2. Social embeddedness

Studies on *social embeddedness* have developed an argument stating that due to the emergence of direct food distribution schemes (such as community supported agriculture or farmers' market), food price itself has lost its driving role in food decisions. However, social qualities, such as trust, moral and environmental consciousness have come into consideration as collective benefits over against personal benefits (Penker 2006). Similarly, Sage (2003) defines these collective benefits as "non-economic dimension of personal relationships between producers, consumers and others" (Sage 2003 58) after studying issues affecting artesian and organic food supply chains in south-west Ireland (Sage 2003). Adding food quality to the notion of social embeddedness, Ilbery and Kneafsey (2000) argue for food quality as a socially constructed notion in the context of purchasing speciality food products. Their findings state on the one hand that regularly returning consumers construct the quality of food produce; however, the trusting relationship between food producer and consumer is at least as important as the quality itself. They actually define the connection between quality and social embeddedness without referring to the former one directly: "this trust is based on the characteristics of the product itself, together with the whole set of circumstances and networks surrounding the purchase of the food product (…). For this reason, it is important not to disconnect the social from the material aspects of quality – the two should be understood as interlinked" (Ilbery and Kneafsey 2000 229).

However, qualifying social embeddedness of local food chains as the description of alternativeness and collective incentives might be misleading. Hinrichs (2000) highlight that marketness and instrumentalism will always be present in local food systems, which means that self-interest and price motivated behavior will always shade the pure locally rooted collectiveness. Moreover, Winter (2003), drawing on his case studies in England and Wales, claims that since every market activity somehow is socially embedded, alternativeness should not treated as an equivalent term to embeddedness (Winter 2003)

1. 5. 3. Spatial embeddedness

Turning to the discourse of spatial embeddedness, it has been concerned with the globalization of food systems. Public and academic attention on the global local distinction have been mostly covered questions about concept pairs, such as, globalization and re-localization, disembedding and re-embedding. Hinrichs' (2003) summary of further attributes related to "global" and "local" could let one assume that *global* appears in association with "corporate benefits", "intensification" and "relation across distance, while *local* seems to be described by opposing terms, such as "community well-being", "extensification" and "relations of proximity".

Accordingly, spatial embeddedness in agro-food studies has been associated with the argument that global food production networks have disembedded food production from social-cultural-spatial structure. Embeddedness theory has seemed to be a sufficient concept to address these beliefs and provide analytical background to understand them. In order to do that, there was a need to slightly bend the Polanyian and Granovetterian foundations towards issues on relations between food and spatiality (Penker 2006) (Hinrichs 2003). Within the domain of human geography, Martin Hess (2004) concise a clear summary of the potential

application of spatial embeddedness theory. Starting with a precise definition, he points out that spatial embeddedness "considers the extent to which an actor is 'anchored' in particular territories or places" (Hess 2004 177). Hess later unfolds this pithy definition in his article by marking out the niche of territorial embeddedness as follows: "This helps to better inform and structure our analysis of socio-economic development, which is shaped by the history of its actors, the structure of its social networks of economic activity, and not least its territorial conditions" (Hess 2004 182). From the perspective of food systems, this theory has been mostly applied to illustrate impacts of disembedding process (Penker 2006). The most frequent notion being addressed by territorial embeddedness is that local food systems are embedded in the context of local social, ecological cultural values, which may be threatened by the development of globalization.

1. 5. 4. Ecological embeddedness

Beyond the social and spatial notions of embeddedness, a small number of agro-food scholars have started stretching the conceptual framework of embeddedness in order to understand the interconnections between food production, consumption and their natural environment. This interest has been raised by perceiving a qualitative shift having gone through the contemporary food systems (Murdoch et al 2000). Murdoch et al (2000) capture this development while concluding the importance of the social science agenda of food system studies, beyond the over-discussed influences of globalization, industrialization and standardization. They understand this approach as a need to address the process how these activities have utilized and domesticated nature. Meanwhile, arguing that nature has become a single residue as a result of industrialized agro-food activities, they point out that: "the notion of embeddedness can, therefore, be extended to include natural, as well as social, relations". (Murdoch et al 2000 116). Moreover, they point out that quality turn and re-embedding

processes are clearly associated with regions without the significant presence of the industrial model of food production (Murdoch et al 2000).

These notions have formed the foundation of *ecological embeddedness,* which clearly seems to be grounded on the entire agro-food embeddedness discourse that has been discussed above. However, this branch of the discourse appears to have no clearly established legs to stand on, simply because of the relatively small number of case studies have been done, led by interests in ecological embeddedness of food systems (Morris and Kirwan 2010 2011b) (Penker 2006) (Feagan and Morris 2009) . Nevertheless, Morris and Kirwan (2011a) recently reflected to these conceptual deficiencies by re-defining and re-framing the fuzzy notion of ecological embeddedness. Accordingly, they undertake the task of both conceptualizing and operationalizing the concept aiming to furnish a "useful conceptual tool that takes into account decisions taken on-farm in relation to ecology, thereby helping to understand how the ecological can shape the development of AFNs (Alternative Food Networks) from production through to consumption" (Morris and Kirwan 2011a 327). Before detailing Morris and Kirwan's (2011a) ecological embeddedness theory which will provide the reference point in this research, it might be worth reviewing the academic development of the concept from the beginning to the most recent one.

The first analytical use of ecological embeddedness is linked to Penker's (2006) research, in which she makes the first attempt to measure the ecological embeddedness of food supply chains, namely two bread chains in Austria. Her case study embraces an analysis of ecological embeddedness at the landscape level, which requires a careful consideration of the status of landscape where food production takes place. National parks, conservation sites, special habitats, protected species, soil and climatic conditions might all have to be examined and

evaluated in relation to ongoing food production and consumption activities. Beyond landscape features, Penker analyzes the ecological embeddedness through viewpoints such as transportation, locations of food production, energy efficiency and consumer decisions. In her conclusion she highlights some points that may help to further conceptualize the applicability of the ecological embeddedness concept. Above all, food chains are always embedded in their ecology regardless of alternative or conventional food systems. Moreover, she broadens the applicalibility of analysing embeddedness into conventional food chains too, by contrasting the belief that only alternative food chains can be subjects of such analysis. She demonstrates the opposite by measuring purely conventional bread chains. These points definitely go beyond the notion of spatial embeddedness and recommend future research to focus on questions such as how and where certain food the chain is embedded. Penker's case study (2006) clearly illustrates how to bring analytical elements into the embeddedness research in the context of food chains.

Following up influences made by Penker's article in terms of framing empirical embeddedness research in agro-food studies, one could conclude that the most relevant continuation is linked to Feagan and Morris' (2009) piece. They attempt to raise the importance of the embeddedness concept in studies of alternative food systems by examining a farmers' market in Canada. This case study approaches utilizing the issue through consumers' motivations and the embeddedness concept in order to organize these motivations and "enrich our understanding of the broader sets of values tied to consumer motivations at FMs (Farmers' Markets)" (Feagan and Morris 2009 235). In terms of natural or ecological embeddedness, they embrace values, such as organic and sustainable farming practices, possible consumers' concerns about GMOs, animal welfare issues, salmonella and bacterial infections, synthetic inputs, notions regarding food miles and global warming and interests in

eco and local labeling food purchase. Surprisingly, their findings on natural embeddedness fall behind with the level of responses gained in the spatial and social spheres. They explain the weakness of natural embeddedness of consumers' motivations firstly: "the lengthy history" of the market that might result in making socio and cultural motivations over-dominant in purchase decisions. Secondly, there are only a few farmers with the commitment towards organic or ecologically friendly farming practices due to the weak regulations on vendors' participation regarding the quality of their produce. In conclusion, Feagan and Morris' study (2009) proceeds with the refinement of the use of the embeddedness concept by supporting the earlier mentioned Hinrichs' notes (2000) on the relationship between the lack of marketness behavior and the role of embeddedness in agro-food studies.

The need to identify the practical implications of studying ecological embeddedness emerges as a key question in Morris and Kirwan's (2010) paper. They make a link between this concept and reconnection notion of alternative food network studies. The reconnecting agenda within the discourse on alternative food networks interprets these food initiatives by emphasizing their niche in reconnecting "consumers, producers and food in a new economic space which re-embeds food production and consumption" (Venn et al 2006 255). In this sense, Morris and Kirwan's (2010) interest is driven by the particular role of naturally embedded food products in these food systems. Accordingly, they develop a concept to illustrate the potential of alternative food networks as a driver of the reconnection agenda. This concept focuses on "geographical knowledges that are used to promote the consumption of different commodities, and how these knowledges are constantly shaped and reshaped by a range of actors within the circuit (Morris and Kirwan 2010 133)". Their conclusion highlights that trust is the most important element in these food relationships which obviously places a particular emphasis on direct food interactions such as farmers' markets or community

supported agriculture. Only these selling methods can make consumers interested in valuing, accepting and trusting any information about food commodities otherwise reconnection does not take place between them and producers (Morris and Kirwan 2010).

In their following paper, Morris and Kirwan (2011a) further develop the concept of ecological embeddedness. This recent contribution shows a pathway towards a clearly conceptualized ecological embeddedness concept by refining and interrogating the whole concept. What makes their piece remarkable is that they refurnish the whole discourse into a clearly defined set of recommendations on the key elements of a possible empirical investigation. Moreover, they identify the academic niche of the ecological embeddedness concept by pointing out that: "it can be used as an analytical tool to explore the ways in which the underlying ecology of production plays a role in the development and operation of AFNS (Alternative Food Networks)" (Morris and Kirwan 2011a 329).

Regarding the conceptual refinement, Morris and Kirwan (2011a) emphasize the importance of communication in the relationship of producers and consumers. Accordingly, there must be a communication flow from farmers towards consumers with information on the natural environment of the production. More precisely, the content of this communication must be related to the on-farm ecological relations in order to influence consumers' purchasing decisions for the sake of further purchasing. Morris and Kirwan (2011a) define such a system as ecologically embedded.

If communication works well, exchange process between consumer and producer might be enriched by added economic value (higher market price), generating interest and trust for the next purchasing. At this point they directly apply the Granovetterian notion of embeddedness

as they see food purchases being embedded in ongoing ecological relations. Similarly, Granovetter sees economic exchanges being embedded in ongoing social relations and networks (Morris and Kirwan 2011a). Deriving from this, the last step in the conceptual clarification is taken by pointing out that "the notion of ecological embeddedness in this sense enables recognition of how, through its communication to the consumer, the underlying ecology of production can facilitate the realization of added value for the producer, satisfy the demands of certain consumers and contribute to on-farm environmental management" (Morris and Kirwan 2011a 326).

Beyond the conceptual refinement, Morris and Kirwan (2011a) also provide recommendations regarding how to design an empirical research on ecological embeddedness. For the sake of an easier understanding they come up with four dimensions to explain the elements of ecological embeddedness in the case of alternative food systems. Regarding to the fact that I will use these dimensions in my empirical research, I briefly summarize the core of the four dimensions here and then I will provide a more detailed description after it has been applied to the case of this thesis.

Morris and Kirwan (2011a) suggest four dimensions, namely *understanding, realizing, utilizing* and *negotiating* to serve as a guide how to run an empirical research aiming to reveal the extent of ecological embeddedness of an alternative food system. Exploring these four dimensions does not require any quantitative assessment methods to use, since researchers apply a constructivist perspective to disclose the interconnectedness between on-farm ecological relations and the behavior of actors (Morris and Kirwan 2011a).

The dimension of *understanding* encompasses questions whether farmers or food producers are aware of on-going ecological relations in their farming system or food enterprise. Morris and Kirwan (2011a) assume that the more comprehensive understanding farmers have, the more ecologically embedded is that given farm system. In terms of benefits gained from ecological relations, they define intrinsic and instrumental values as factors to present alternative food system. The more intrinsic values indicate a farming system in which "commercial benefits being seen either as incidental, or as a beneficial by-product" (Morris and Kirwan 2011a 326), while the more instrumentalist values assume farming systems "where emphasis is placed on the economic value of on-farm ecologies" (Morris and Kirwan 2011a 326). However, the authors are aware that the purely intrinsic or instrumental way of understanding ecological relations and benefits is unlikely to exist because it is rather likely to be represented as combination of them.

The second dimension, *realizing,* is to explore the ways how "production processes and practices realise ecological benefits" (Morris and Kirwan 2011a 327). The list of elements that might be revealed within this dimension may include different land use management practices, selections of seeds or breeds or choice of irrigation system. However, exploring these processes and practices should aim to see their "suitability to the localized ecological conditions" (Morris and Kirwan 2011a 327) in order to be able to measure the extent of ecological embeddedness of certain farming or food systems. Additionally, Morris and Kirwan (2011a) point the attention to off-farm actors as well, as underlining the importance of regulations in maintaining a supportive and financially friendly environment to on-farm actors.

Utilizing, the third dimension, is called for the purpose of examining "various ways in which information about ecological conditions of production is utilized to influence the exchange process" (Morris and Kirwan 2011a 327). Accordingly, this dimension consists largely of elements which account for the promotional practices and materials including labeling, certifications, storytelling or winsome attitude. In other words, every effort that farmers make in order to attract consumers and influence them in their purchasing decisions.

Similarly to the former one, the fourth dimension also examines the content of the communication flow between farmers and consumers; however the *negotiating dimension* takes a perspective from the consumers' side. Looking into consumers' considerations requires empirical methods that must be able to explore "consumers' value, accept and trust the information they receive" (Morris and Kirwan 2011a 327). One of those empirical methods has been applied in the research of this thesis and it will be introduced in the methodology chapter.

This chapter has given a comprehensive overview of the concept of ecological embeddedness as Morris and Kirwan (2011a) understand and conceptualize it. It has been sketched that this research will follow their suggestions how to design an empirical research in order to explore ecological embeddedness of alternative food networks. This concept has been placed in a widely defined theoretical framework including an establishment of a system level agro-food discourse, introduction of academic literature of alternative and alternative food systems and a brief conceptualization of farmers' markets. The next chapter will review the major trends and developments in the Hungarian agro food sector in order to see the environment within small-scale food producers have to produce.

Chapter 2 Introduction to data collection methods

The methodology section of this thesis contains four separate sections. Firstly, there will be a brief *introduction of the research design* to define the type of my study. The second section will detail the *methods of data collection* and analysis as well as problems that the research faced. Furthermore, reliability, representativeness and concerns about limitations will be also taken into consideration over this section.

2. 1. Overall research design

To overview the research design, it may be necessary to restate the core interest of this research. The research aim of this thesis was borrowed from Morris and Kirwan's (2011a) seminal paper. Their conceptual refinement of ecological embeddedness is driven with the intention to understand "the variable significance of on-farm ecologies to the development and operation of AFNs (Alternative Food Networks) from the perspectives of key actors involved" (Moris and Kirwan 2011a 323). As Morris and Kirwan (2011a) point out, this angle of alternative food studies has never been in the centre of agro-food studies' attention. Accordingly their interrogated and refined concept of ecological embeddedness has not been applied since their piece was published either in international or in Hungarian agro-food studies. Therefore, this research undertook to fill the knowledge gap not just in experiencing the feasibility of this concept in terms of empirical research, but in contributing to the Hungarian discourse of agro-food studies by addressing a novel dimension of alternative food systems. *Accordingly, this research discussed the questions whether studying ecological embeddedness is relevant and feasible in the context of a Hungarian food system and examined whether it affects the development and operation of a farmers' market, as an alternative food system*.

Regarding the type of my study, one could see that this research is classified as qualitative field research. Furthermore, this research entirely fulfills the criteria of an ethographic case study. In this sense, this research design was used to examine in detail whether the concept of ecological embeddedness is a feasible analytical tool to study an alternative food system throughout an empirical research project. Grounding on Babbie's (2001) classic piece, farmers' market is considered as an element of social life that is suitable for field research. Accordingly, this farmers' market is a *settlement or small-scale society* including key actors such as producers and consumers. As a case study, it consists of a clear conceptualization of the issue, a comprehensive review of the relevant literature and a discussion of the results inform in three thematic chapters.

2. 2. Methods of data collection

In relation to the methods of data collection, this research was built on the following methods: *different types of interviews including semi-structured interviews, stall-talks and small talks, participant observation* and *dot-voting assessment*. This section will provide a brief description of each method. Descriptions are mostly based on my experience with a major focus on possible problems and obstacles.

Regarding the interviews as the primary way of data collection, this research relied on three different types of interviews. They differed in circumstances in which they were carried out. One of these was *semi-structured interviews* with farmers and food producers in every case, when interviews took place in a convenient and comfortable environment. Semi-structured interviews were conducted loosely following an interview guide because directions of these talks were very much depending on the interviewees and the concrete cases. Semi-structured

interviews gave a great coverage of farmers, food producers and their activities, which means that this method contributed the most to the data collection with its systematic approach.

Another type of interviews, called *stall-talk* was conducted at the market on market days while farmers and producers were selling their products and serving their customers. This method seems to be inconvenient and inefficient because of the high chance of constantly recurring customers; nevertheless, it proved to have some practical advantages comparing to a normal interview situation. Standing behind a stall with a vendor gives a unique opportunity to observe interactions and behaviors of vendors and customers in food exchanges in practice. These insights into their conversations yielded substantial information to my research. The content of these talks have already received a great attention studying them from a wide range of perspectives (Lyon et al 2008, Moore 2006, Kirwan 2006, Milestad 2010 et al). Grounded on these works, observations could obtain results on the atmosphere, the patterns of behavior, the mutually accepted conventions; the trust and the conviviality of relationships within these stall talks.

Thirdly, during my regular attendance at the market, there were several *small talk*s taking place with farmers and producers. Beyond developing a good relationship with farmers, these informal and loose small talks perfectly served the purpose of data collection as key information were often brought up as matters of talks. Later, this information was utilized not just as significant findings of this research, but as important elements to ask for in further interviews.

With respect to limitations in case of interview based date collection, it is important to emphasize that intention was to achieve representativeness through a diverse selection of

vendors. Diversity was defined in a way to cover the most dominant type commodities being sold at the market. Accordingly, 2 horticultural farmers, 1 beekeeper, 1 dairy farmer, 1 herb gardener were selected for semi-structured interviews. Furthermore, 1 syrup producer, 3 horticultural farmers were caught on stall-talks at the market. Their total number represents approximately the 10% of the average number of total vendors; however, this number could be even higher if retailers would be excluded from the total number. In terms of representativeness, it is clear that this methodological approach was not based on any probability sampling method. Selection of interviewees was done in assistance with the market manager or it was driven by my personal sympathy. Snow-ball method[1] proved to be a feasible method because vendors tended to recommend other vendors for interviews. Concerns about reliability might be based on the fact that statements and conclusions of this research are grounded on findings coming from arbitrarily selected interviewees. However, in my point of view diverse selection might be able to compensate the weakness and imperfection of interview based data collection methods.

As mentioned above, *participant observation* was part of data collection methods as well. Considering the nature of a farmers' market, it seems to be inevitable that the researcher becomes affected by ongoing actions while attending markets. Farmers' markets are complex and diverse social phenomena due to the high number of actors, relations, interests, not talking about the wide range of products present. In a case like this, observation can be made and information can be picked up by simply walking through and watching the hustle and bustle of the market. Numerous observations and findings were recorded as field notes and utilized later.

[1] Borrowing a definition from Babbie (2001), snowball method is a nonprobability sampling technique, which some consider to be a form of accidental sampling, (…). „Snowball" refers to the process of accumulation as each located subject suggests other subjects" (Babbie 2001 180).

As part of participant observations, *vendor's count* was conducted. In order to portray a rough picture of the available produce, the total number of vendors and their produce simply counted and recorded. Furthermore, to illustrate the difference between Wednesday and Saturday market days, two counts were conducted separately on these days. Choices randomly fell on a Wednesday on the 26th of June and on a Saturday on 6th of Saturday.

Perhaps the most interesting part of the data collection was the so called dot-voting assessment. Dot survey is considered as a new, simple and cost-effective method to conduct surveys with participants in public locations, such as a farmers' market (Curtis 2007) (Lev, Brewer and Stephenson 2007) (Lev, Brewer and Stephenson 2008). A brief description of this method will be followed by a summary of practical experience in the followings.

Dot surveys significantly differ from conventional survey methods. In a dot survey, questions appear on easels or on flip-charts which are preferably located in the center of the market. Participation requires recipients to answer the questions on their own by using sticky notes in order to mark their responses. Accordingly, questions are preferred to be close-ended for the sake of easier and quicker filling in (Curtis 2007) (Lev, Brewer and Stephenson 2007) (Lev, Brewer and Stephenson 2008). Lev, Brewer and Stephenson (2007) provide three major concerns to consider in use of dot-survey. Since respondents leave their responses on the poster, latecomers can be affected by them, which might influence their responses. This visibility linked concern can be prevented by questions with clearly individual answers, such as 'What is your gender?' or 'Where do you live?'. Furthermore, regularly removed and refreshed posters can also reduce the chance of influencing new respondents. The second concern that may cause difficulties is related to the number of questions. Too many questions might reduce the willingness of customers to go through every question. Therefore, the

selection of questions has to ask for information that is crucially important to the research. The third concern, that Lev, Brewer and Stephenson (2007) voice is that the cross-tabulation of data is not manageable because answers cannot be linked to each other. Considering these concerns, the authors evaluate this data collection method simple and efficient as "this data-gathering approach actually adds to rather than detracts from the overall atmosphere of the market and thereby allows us to achieve our most ambitious goal" (Lev, Brewer and Stephenson 2007 89).

Dot-voting assessment was conducted on a Saturday market day from early morning to the end of the market. The home-made easel with an information sheet was set up at the northern end of the market right next to a farmer's stall. This proved to be a good spot because people approaching the market from this side could not avoid at least having a quick look at the easel. However, the easel was quite attractive enough itself. Accordingly, a great majority of people spent at least one second to start reading either the information sheet or the questions.

The general welcome was surprisingly positive and supportive as people often wished good luck to the research. What was possible to understand from respondents' motivations to participate let assume two things. People were either attracted by sticking dots on the posters to indicate questions that they found interesting anyway. Another thing that captures their attention was the fact that they could contribute to the research and my thesis. Young parents with children were less interested in participating; however, children were expected to help make their parents involved by getting attracted by colorful sticky dots. To the contrary, the elder generation, especially elder ladies appeared to be more helpful and willing to participate. The total number of people who certainly responded to at least one question is 74.

Regarding downside experiences, there are a few issues that must be shared. Having only 4 questions on the easels, it is recommended to have at least two people to supervise the assessment. In this way, one could help out struggling people with the questions, while another one could get into conversations with talkative respondents for further information. In this case, the researcher got into an uncomfortable situation because useful information might have been lost by having no capacity to talk to everybody. From a methodological point of view, three issues must be mentioned here. Firstly, statements in the first question proved to be too positively phrased. This became clear because two statements received totally positive support which could make less contribution to the discussion as it had been expected before. Secondly, in spite of people's helpfulness, many of them did not go through all four questions probably because of their inattention. Thirdly, people tended to have problems with getting the meaning of certain questions. This can make one assume that questions were not phrased understandably enough. Consequently, this greatly affected the reliability of the assessment in the sense of the number of total respondents. Therefore, only estimations can be made regarding the total number which must be between 50 and 70. As a sort of recommendation: the above mentioned plus one person to supervise and questions designed in an even a more carefully way may help prevent these issues.

The overall impressions correlate with what concerns pointed out by Lev, Brewer and Stephenson (2007) above. This method, however, was designed to conduct rapid market assessments, proved to suit the small-scale of this research to collect relatively reliable data from the total population of the market. Talking about the scale, this method is almost costless as it needed minimal investments in supplies such as flip-chart sheets and sticky dots. Comparing this to the fact that it was very attractive among customers, one could conclude

that dot-voting is a very efficient data collection method for public places with big a population. Photos of the assessment are given in the Appendix.

Chapter 3 The last 25 years in the Hungarian agriculture and food sector

The last 25 years of Hungarian agriculture encompasses an era of a painful and traumatic transition from a collectivized agriculture towards a capitalist agriculture. It is uncontested that studying the social and economic contexts of agricultural production has been considered to be one of the most comprehensively discussed issues in Hungarian academia (Kovách 1997). Although this is true both in the case of the pre- and the post-transition era, this section will revise only the last 25 years. Even a brief outline of the last 25 years of Hungarian agriculture is likely to stretch the limits of this section; therefore, the focus here will fall only on the most important trends, developments and turning points.

The recent decades in Hungarian agriculture and food sector may easily be described with a few key words: privatization, concentration, polarization and re-structuring. A vast amount of literature (Csite and Kovách 2002) (Harcsa, Kovách and Szelényi 1994) (Kovách 1989, 1997, 2003, 2012), (Juhász 2006) (Kovács 2010) (Márkus 1989) (Szelényi 1988) has given an accurate overview of the agrarian development in the post-socialist era. Kovách (2012) divides this period into two stages. The first one encompasses land redistribution and the formation of a new ownership and land property structure up to the late 1990s.The second stage, starting around the Millennium and being still in progress, has completed the agrarian development by becoming integrated into the Community scheme; meanwhile, a remarkable production and land use concentration has been shaping the whole sector into a highly polarized agrarian system.

Some major trends clearly portray the first period of the transition. The early years of the 1990s were marked by a massive decline in agricultural production presenting a decrease of

66 % between 1988 and 1992 (Harcsa, Kovách and Szelényi 1994). This agrarian recession was associated with a number of negative developments, such as the increasing number of uncultivated lands, rising agrarian unemployment, the falling domestic demand for food and the irrationally increasing tax burden on agricultural activities. Overall, it is no exaggeration to say that "de-collectivization caused a more severe damage in the production, than collectivization at the turn of the 60s" (Harcsa, Kovách and Szelényi 1994).

Beyond the general economic downturn in the early 1990s, a complicated and entangled *land redistribution and compensation system* also affected the agrarian transition in Hungary (Kovács 2010). Although the restricted market became liberated due to the political will to compensate former land owners, the overall agrarian reform did not restore the property and farm structure of the pre-collectivization era (Kovách 2012). Despite aiming to re-privatize former properties, the overall result was a sweeping change in the ownership structure of agricultural property. Csatári and Farkas (2008) briefly outline this change as they point out that out of the total land designated for restitution, one third was bought by owners of compensation coupons, one third remained member-owned at agricultural cooperatives and the last third became the property of the directly compensated relatives of former owners. By summarizing these shifts, they conclude the emergence of 2.5 million new land owners in the sector (Csatári and Farkas 2008). Moreover, Romsich (1999) underlines that these changes resulted in fundamental restructuring shifts causing a massive drop in cooperatives' farmland (from 72% to 22%), a double growth for business enterprise (from 13 % to 28%) and a triple increase for individual proprietors (from 15% to 50%).

The above mentioned *second stage* of the Hungarian agrarian transition encompasses the first decade of the 2000s, starting on the eve of Hungary' accession to the European Union.

Kovách (2012) refers to these years as the period of a great concentration of land use and agricultural production. The following trends will prove that this is an accurate description of the period.

Firstly, there was a drastic decrease in the *number of farms*. Csatári and Farkas (2008) highlight that new landowners either leased their lands to agro-business enterprises or started cultivating their relatively small-scale farming plots (under 1 hectare on average). The former group of private farmers (1435000) has been reported to dramatically decline in numbers as nearly half of them abandoned farming activities by 2003. In contrast, the private sector (including co-operatives and agro-business companies) had initially seemed to thrive in number and prosperity, but by the time of the EU integration, their number became also stabilized around 7600 firms.

In terms of *land use concentration*, Kovach's (2012) figures clearly show a shift towards a sharply polarized and dual structure. Looking into the details, one could see that 56.7% of the total arable land was used by the 0.32% of the total number of farmers in 2007. In contrast, two-thirds of farmers had to share merely 1.6% of the total land cultivating nearly 1 hectare of land on average.

Beyond these fundamental changes, a remarkable *concentration* has been taking place in agricultural production as well. Firms in crops and horticultural production have grown by 30% achieving a share of 73% in the total agricultural production, while livestock producer firms presented the 10% of share in 2005. Moreover, crop producers have mostly turned to intensive cereal production, which raises serious concerns in terms of environmental security and market vulnerability (Kovách 2012).

In the steam of these fundamental changes, small scale farming sector obviously has not remained undisturbed. The successful integration between small-scale and large-scale farming was named as part of the "Hungarian miracle" during the socialist era. This embodied a fruitful "combination or symibiosis of small- and large-scale farming" (Juhász 1991) and played an elemental role both in domestic food provision and social elevation within rural farmer communities. Hardly anything left of this structure as large scale organizations abandoned their integrating activities. In the lack of these activities, small-scale producers directly got in touch with market. Accordingly, these developments have set a trend of a massive decrease in number among private farms producing goods; however, this farming strategy was proved to be the most frequent in the mid 2000s (Kovách 2012) (Kovács 2010).

Beyond these restructuring trends in the agriculture, food retailing sector has undergone some similarly significant changes resulting in a completely new set of retailers in terms of the last 25 years. Referring to how Juhász and Stauder (2005) summarize recent changes in retailing sector may suggest a clear parallelism with agricultural sector: "The key words of the changes in retailing which we also used as a guideline in our analyses are: concentration, more concentration (buyer groups), competition of store formats, private-label goods" (Juhász and Stauder 2005 1).

Juhász and Stauder (2005) provide a comparison of retail sales in Eastern European countries with a conclusion that Hungary had a well developed retailing sector with the highest concentration of sales between 1998 and 2003. Obviously, the concentration had started earlier in a strong association with changes within agricultural sector. The authors break down the post-socialist era into four periods in order to analyze changes in Hungarian food trade,

namely *spontaneous privatization (1989 - 1990), privatization (1991 - 1996), concentration begins (1996 - 2000), accelerated concentration (2000 -).* Without going into the details, the names of these periods may be able to mirror what developments have affected the retailing sector in Hungary since the early nineties. The result of the concentration is a "two poled" structure in which sales take place either in large surface hypermarket chains operated by multinational companies or in small-shop networks with mostly Hungarian ownership. This pattern could clearly remind one about the tendencies of restructuring of the agricultural ownership and organization structures.

Juhász and Stauder's analysis (2005) shows, while it makes a link between production and trade that both sectors have been shifting towards the same direction. Their analysis also draws on what Juhász (2004) points out regarding the new relationship between food producers and food traders. He states that agricultural producers and food entrepreneurs are exposed to the interests of food traders and retailers as they dictate the terms of integration. The big multinational and Hungarian retail chains took the place and the role of former co-operatives in food supply chains, which resulted in many small producers suffering to become suppliers of these retail chains. Juhász and Stauder (2005) briefly portray the unequal relationship of small producers and retail chains highlighting some problems making becoming suppliers of a retail chains difficult for small producers. Among others, the authors list problems such as their lack of capital, their weaknesses in establishing and maintaining brands and providing sufficient quantities, their shortage of proper logistic and distributional tools and their limited knowledge of the market as a whole. However, Juhász and Stauder's (2005) research touches upon possible strategies to ease these obstacles off in order to get integrated into the supply chain of one of the big retailers. These strategies may cover governmental measures to improve infrastructure and accessibility to risk reducing and

insurance programs or encourage investments in small-scale production and processing solutions.

A summary of performance of food sales is borrowed from (Mácsai et al 2012) to illustrate the influences of above discussed trends on market shares within food sales sector with a focus on food markets and direct sales. Accordingly, Mácsai et al (2012) suggest that food markets as a type of direct sales has been experiencing their renaissance, as this type of food exchange still accounts for 5% within the overall sale channels even though the above discussed expansion of food retailers[2] whose share is more than 80%. There are two reasons, that Mácsai et al (2012) highlight to explain this remarkable achievement of food markets. One of them is that, in terms of everyday shoppings, one-fourth of them take place at a food market, while every 6th occurs through direct sales. These high positions are even exceeded when the authors focus on ethnocentric customers and their food purchasing habits. In a search of Hungarian produce, people tend to turn to food markets firstly (55%), then small shops (42,6%), and lastly producers' sales (30,4%). Given these, it shows that Hungarian customers' trust in these places is much higher than in hyper- and supermarkets. This can clearly draw one's attention to the opportunity that this segment may open up for producers engaged in direct sales.

Briefly touching upon the discourse of sustainable and multifunctional agriculture and food production in Hungary, Ángyán's beliefs may be the best choice to borrow. Ángyán (2012) criticizes the last 25 years in these sectors arguing for an agriculture based on family farms from small- and middle-scale cultivating a mosaic landscape. He calls the attention to the developments of industrial large-scale farming which looks at the landscape and rural areas as

[2] In this comparison, food retailers consist of hypermarkets, supermarkets, discounters, domestic chainsn and independent small shops.

one big factory hall. This "Latin American-type"(Ángyán 2012) biological industry poses severe threats to rural and urban areas, to the society and the environment and to food security and food sovereignty. In his explanation, Latin-American type biological industry is a tenure system with total domination of huge private latifundiums. Instead, efforts should be channeled into initiatives to re-structure capacities in local processing, local sales and local markets. Crucial needs of Hungary, as he points out, to find a way to a diverse and multifunctional agriculture because this is the only way to preserve rural landscapes which produce crucial ecosystem services, provide food security and sustainable energy sources and present recreational opportunities.

Similarly to that clear path towards sustainable and multifunctional agriculture and food production that has been voiced by Ángyán, significant amendments have been made recently to promote small-scale local food systems. Balázs (2012) summarizes the new framework highlighting three new regulations granting local farmers and food producers access to local sales networks such as markets or public procurement. These new regulations include the decree of small-scale producers, the procurement act and amendments to the Trade law. What seems clearly, according to Balázs (2012) that the governmental intentions have been going towards an "ethnocentric-protectionist political agenda" (Balázs 2012 407) aiming to encourage small-scale food producers. With regard to concrete measures, the most important ones cover the following issues: increased quantity of produce that can be sold in a 40km radios of the market place with a general exception in case of selling in Budapest; new and simpler notification and hygienic restrictions in case of farmers' markets and simplifications for local farmers to get involved in local food sourcing process of public institutions such as local schools, kindergartens or caterings (Balazs 2012). One example might be enough to emphasize the importance of these amendments: according to the old regulations, small-scale

farmers from a certain village were allowed to sell their crops solely locally; however the whole village might have these crops on their own too. In case of indigenous species, this regulation proved to be irrational as it prevented these farmers from benefiting from their special crops at markets outside its designated growing territory (Szabadkai 2010). Another influential development within this restructuring process is that small-scale farmers compulsorily have to join the Hungarian Chamber of Agriculture. The aim of the legislator with this measure is to improve the transparency and competitiveness within the agricultural sector. Ideally, having all the agricultural actors in one organization would serve as a representative institution of the whole sector, instead of small interest groups.

All these trends and relevant regulation amendments have resulted in a structure in which four distinct actors are involved in agricultural production in Hungary. Three of them belong to private farms: licensed *traditional small-scale producer* (őstermelő), *small-scale producer* and *family farmers*, while there is one labeled as agro-business corporation. Traditional small-scale producers are allowed to have crop production or plantation on their own land and produce from their own crops. They are discharged from paying any tax after their income if it is not more than 600000 Forints income. Small scale farmers can boost their income up to 8 million Forints. Due to recent amendments, they are all allowed to sell their produce directly at local markets up to a certain quantity. In the end / conclusion, amendments narrowed the traditional small-scale farmer category to single small-scale farmer. Above this income level, farmers are counted as family farmers or agro-business corporations.

Although governmental efforts indisputably aim to serve small-scale producers' interests, administrative burdens are yet to be simplified (Balazs 2012, Szabadkai 2010, Mácsai et al 2012). These burdens pose administrative obstacles to them such as issuing invoice and

keeping production, pesticides and sales records in logbooks (Balázs 2012). In their recent paper, Mácsai et al (2012) reveal that producers keep crossing the same barriers in case of public procurement. Even if there are intentions of local sourcing from both sides (producers and public institutions), difficulties make these desired local co-operations impossible. Farmers voiced that public institutions often did not pay on time and they were willing to purchase at unacceptable low farm-gate prices. Moreover, these institutions, especially schools, need supplies on a seasonal basis which may not be feasible for most of the small-scale farmers. Obviously, farmers would require more calculable clients. Mácsai et al (2012) also points out that farmers tend to avoid applying for subsidies because it would make them exposed to extraordinary monitoring.

To sum up this Chapter in a few words, one could say that Hungarian food and agriculture sector left a remarkable period behind in the last 25 years. It is remarkable both in terms of alarming trends in resources concentration and in terms of promising developments in advocating local food producers and systems. Recent amendments have provided a solid clear basis for development of local food systems. New conditions targets at making direct sales easier for small-scale producers through farmers' market primary. These promising developments appear to be in line with some key elements of the theoretical framework in Chapter 1.

Chapter 4 Ethnographic description of Szentendre market and contrasting reviewed concepts

The first substantial chapter gives a detailed ethnographic description of Szentendre market and contrasts my observations and findings by revising the notions of farmers' market from the conceptualization and theoretical background section. As a qualitative field research paradigm, ethnographic approach is understood according to Babbie's (2001) definition: "an ethnography is a study that focuses on detailed and accurate description rather than explanation" (Babbie 2011 281). This descriptive section is needed in order to outline the local context around Szentendre market. Furthermore, this chapter also serves the purpose to see to what extent this market corresponds to the concepts introduced in Chapter 1. Concepts of alternative food networks, local food systems and farmers' markets will be contrasted with research findings over the course of this chapter. These two distinct approaches will constitute the first thematic chapter in which substantial information will prepare the ground for the next two chapters.

Szentendre is a middle size (28963[3]) town located in the Danube Bend. It lies on the right bank of the river Danube, 22 km from the capital, Budapest. The beautiful location, the historical city center and the easy accessibility from Budapest have made Szentendre an exceptionally attractive and popular destination not just for tourists and daily visitors but full time residents too.

Szentendre farmers' market is located along a little stream, called Bütykös patak, on the edge of the old town. Customers can purchase at the market two times a week: Wednesday and Saturday, from early morning to early afternoon. The market has been operating for so many

[3] Data source: https://www.teir.hu/tmp/pdf35968.pdf [consulted 22 July 2013].

decades that farmers in some cases introduced themselves as the third generation of their families selling at this venue. Due to the lack of a comprehensive research on the history of this market, only calculations can be made to estimate how long this market has been serving customers with local food. Relying on archive photos (Unknown artist 1956), it is approximated that this market had already operated in the fifties; however, at that time it had been on the other side of the stream, but basically on the same spot.

Studies on Alternative Food Networks have been strongly emphasized as a major element of the theoretical framework of this study. In terms of alternativity of Szentendre market, one could say that it does not meet the notions of alternative food networks in the meaning as it has been outlined in Chapter 1. These networks have been mentioned as deliberate intentions to create a new way of food producing and distributing. In the case of Szentendre market, special attention falls on the term new because Szentendre market is not a recently initiated food system. Lack of any local studies on the history of the market makes it impossible to refer to its exact life time. However, it is clear that people have been purchasing food at Szentendre market for much longer than the first representatives of commercialized food retailing forces emerged in Hungary. The fact that several farmers introduced themselves as the second or even the third generation of their families selling at this market may be enough to assume that Szentendre market used to serve as a significant or even a primary food source in the town. This means that the more commercialized food retailing places emerged in the town, the less the market served further as a primary food source. In the competition for customers, Szentendre market gradually lost its position in local food distribution and slowly became just another place to purchase food meaning that it has become an alternative food source by now.

Location of the market has upsides as well as downsides. Starting with the positive aspects, the most important is that it lies on the edge of the old town and in the neighborhood of some public institutions, such as a clinic and a high school. Due to the former, it has an advantageous central location attracting many groups of tourists to pass through during tourist season, although their purchasing power is not likely to play a major role in farmers' incomes. However, the same cannot be said about regular customers whose attendance is usually combined with visiting one of the public institutions nearby, especially on Wednesdays.

Talking about downsides of its location, the market yard itself poses some challenges. It is marked out at the end of a street that goes along the stream. Even though this street is a slow-speed zone (speed limit 30km/h), this does not prevent cars from driving through the market annoying both vendors and customers and themselves as well since they can drive through only at walking pace. The market manager's proposals to close down the street and turn it into a dead-end street have fallen upon deaf ears so far. Another problem with the yard is its size; however, this seems to be a seasonal problem rather than a permanent issue. During peak season (from May to September), the market is so crowded, that the market reaches 110% of its capacity, while during winter season it rarely goes above 20 or 30%. According to the market manager, there is a demand for further stalls from vendors and farmers; however there is no way to expand the yard in size because of the characteristic of the location. Beyond the available size, weather causes attendees a lot of problems. Open air markets have this in their nature that they are fully exposed to the weather circumstances. Cold days in winter are expected in advance by farmers, but random rainy days are much more difficult to predict and adapt to. Accordingly, my interviews came across many times with voices complaining about

rain as the greatest threat to a good market: "Customers are like flies. They extremely fear rain"[4]

The arrangement of the market yard consists of two lines of stalls along both sides of the street. There are 60 stalls; however, it appears to be insufficient during the peak season. The stalls are immobile therefore vendors need to carry their produce from their vehicles to their stalls because there is no place to park within the market yard. Unlike many weekly markets in Hungary where vendors randomly sell from their vans or trucks, Szentendre market has a neat and tidy appearance of fixed stalls all in the same size.

Stalls are fixed in another way as well. After a few attendances, it becomes clear that majority of vendors have fixed, unofficially named stalls. Vendors verified this observation in "stall-talks" as they stood for their stalls unofficially having their names on them for years or even decades. This means that they always have priority over those stalls and the market manager keeps an eye on these privileged vendors and their favored stalls. Having a fixed stall does not give any advantage in the competition with other vendors because there are no less and more advantageous stalls. However, insisting on the same stalls is rather a matter of habit from the side of vendors assuming that customers expect them to show up at the same points of the market.

In terms of operational details, Szentendre market is not an exception in Hungary. The market belongs to the town; however, the duties of operation and maintenance are put out to a competitive tender. There is a contract made between the town and the winner whose role is to function as a market manager. What the town expects from the market is to provide priority

[4] Quote from a dairy farmer women.

for local farmers against food retailing entrepreneurs. The way to achieve this is totally up to the manager as the contract gives them full right to decide on them. Furthermore, this system means that vendors at the market might have to cooperate with an external person on a daily basis as it is currently the case at Szentendre market, since the manager is from Budapest, not from Szentendre. He has been working at the market since 2010; however, he had been involved in this job for an even longer time as the assistant of the former manager. As a key person at the market, it is crucial for vendors and farmers to get along with him. Concluded from his conversations with them, he treats these relationships with a consistent professionalism; however friendliness and conviviality were recurring elements in these interactions. He was a key person in this research as well, since his guidance was vital in getting to know farmers before asking them for collaboration in the research.

As the manager is the only person having authority over the image of the market, it is entirely up to him who is allowed to sell at the market and who is not. His principle clearly prefers farmers to food retailing entrepreneurs; however during winter season the market needs these retailers otherwise the yard would be empty. Obviously, entrepreneurs stay for the peak season as well which sometimes result in a situation in which it cannot be surely figured out whether certain vendors are selling their produce or they have purchased them at a wholesale market before. Moreover, he is not even authorized to inspect the sources of produce, as only national agencies have rights to do that. These checkings take place on a random spot-checking basis a very few times a year.

Beyond favoring farmers, it is also taken into consideration to provide diverse supplies at the market from local food through tropical fruits to kitchen equipment: “There must be

everything at the market"[5]. One could say that this approach reduces the character of the market as a farmers' market, though vendors selling non-food produce do significantly less trade than vendors with food products. Furthermore, minority of non-food vendors usually account for not more than 10% of the overall stalls.

Discourse of local food system studies introduced in Chapter 1, as another key element of the theoretical framework, can also enrich our understanding of Szentendre market in terms of locality. The definition of local food system, borrowed from the Institute for Prospective Technological Studies (2013), points out that "a local food system is one in which foods are produced, processed and retailed within a defined geographical area" (IPTS 2013 28). Grounding on observations could arrive to the conclusion saying that Szentendre market does not fulfill IPTS' definition. The fact that food retailers are also allowed to sell food produce at the market, slightly weakens its embeddedness into the local food production. There is no doubt, the great amount of food produce coming from outside this defined geographical area; however, this is rather a failure of the legislator that leaves loopholes in the regulation system.

In the lack of a regulation system that is not able to guarantee customers that solely farmers can sell their produce at a farmers market, there must be other practices to help customers decide between vendors and vendors. Sometimes, sober observations among vendors would be enough to see that certain vendors betray themselves by selling produce that has been unlikely grown by them. For instance, if there is only one vendor selling strawberries, weeks before the local season start, one could be sure that those strawberries never saw that vendor out in the fields. Similarly, tropical fruits can also show that supplies do not have too much to do with soil quality or annual precipitation. Another way to identify with whom we are facing

[5] Quote from the market manager.

was learnt during participatory observations. In any case customers showed some interests towards the origin of food produce and asked for the producer, some farmers tended to respond to them by showing their hands. This scene always seems like an unofficial and informal act of presenting a sort of farmers' certification as far work-worn hands are the best evidence of digging, weeding, harvesting or in short, any physical works. Last but not least, instead of considering engagement into conversations with farmers as a necessary evil, customers and even farmers could benefit from these interactions in many ways. Chapter 6 will show some examples of these mutually beneficial interactions.

To further illustrate the composition of Szentendre market, there were two counts of vendors done once on a Wednesday and once on a Saturday market day. Counts of vendor means a simple headcount of vendors combined with recording their major produce as well. Since this is a bi-weekly market, it was needed to count vendors on both market days to get a picture of an average market in Szentendre. As showed in Figure 3, Szentendre market hosts more vendors on Saturday than Wednesday. Regarding the available supply at the market, it is concluded that vendors present essentially diverse supplies satisfying a wide array of needs of customers; however this diversity was proved to be wider on Saturday than on Wednesday. Presumably, this diversity is not the widest since peak-season had not started yet when counts were conducted. For seasonal reasons, the market is richer in late July and early August because popular summer vegetables such as tomato and peppers.

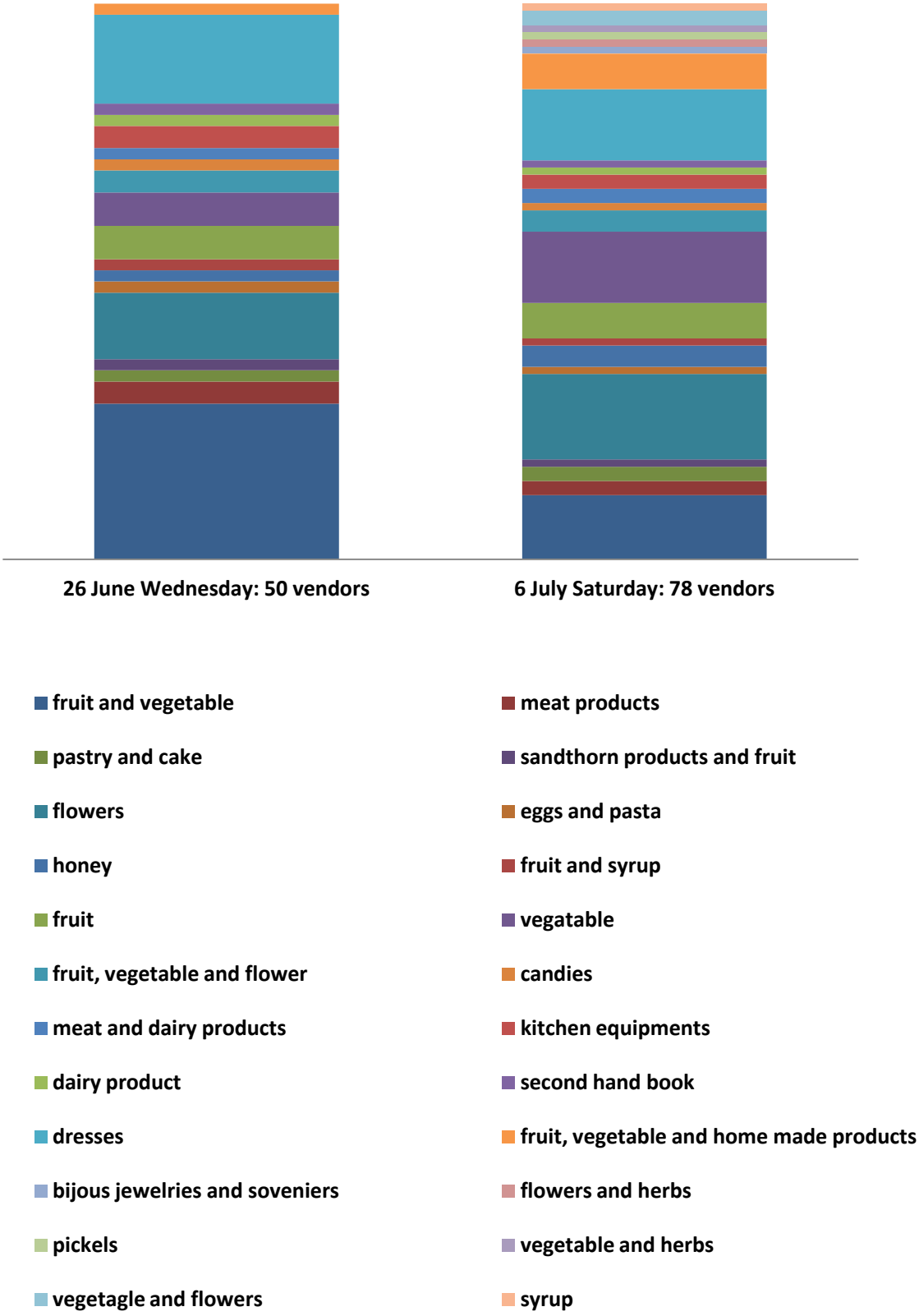

Figure 3 Vendors' count on a Wednesday and a Saturday market day

Beyond getting a perspective of the market in terms of available produce, further distinctions can be exhibited between a Saturday and Wednesday market. Relying on my observations, it can be concluded that, Wednesday markets in most cases underperform Saturday markets in terms of number of attendees and duration. Mass of customers still swarms over the market on Saturdays even after 11 am, while the yard starts thinning out and only a few roamers are left after 10 am on Wednesday. My talks with vendors arrived to the same finding as they pointed out that only bad weather could make Saturday markets even worse than Wednesday markets.

Another dimension of distinctions is the amount of purchase made on the two markets days. According to vendors, customers tend to purchase more on Saturdays as these weekend-shoppings play a more important role in supplying families. Although random observations do not allow to state this unquestionably, but it is likely that on Saturdays, people do their shopping in advance for the next week. Last but not least, Saturday purchases seemed to be carrying more enjoyment than the more purposeful Wednesday purchases, because Wednesday comers rather just drop in on their way to one of the public institutions nearby. However, overlapping is more than possible in cases of regular and loyal customers.

Regarding fees and prices in general, Szentendre market appears to be contradictory. The lack of making a comparison between this market and farmers' markets and supermarkets in the neighborhood makes my observations the only available sources to illustrate the price and fee levels. In terms of fees, vendors have to pay for stalls they sell their produce from. One stall costs 800 Forints for farmers and 1000 Forints for retailers per day. There is no need to make a contract for stalls or certain amount of time. Vendors occupy their stalls in arrival order in early the morning. Paying takes place over the day while the manager goes stall by stall and collects the rents. According to the market manager, this tariff is the lowest comparing to

neighboring towns. From vendors' perspective, it seems that they agree on this because nobody voiced their complaint about fees. They are even allowed to share one stall if they do not need a whole one.

Regarding the price level of the market, quite opposite voices were observed: Yes, they say that it is an expansive market but people keep coming back week by week, anyway"[6] The manager is aware that prices are higher at this market than at other markets nearby. Farmers did not refuse this statement either; however, some of them pushed the responsibility of high market prices towards retailers as they mark out prices by their whaolesale produce: "Wholes vendors set the prices, not the small-scall producers. However, when I have a lot of something in the peak-season, they come and ask how much I price that particular crop. Then they change that price with respect to their quality and quantity"[7]. There was no sign of dumping prices which might be because of the relatively small size of the market. This makes it able to keep pricing practices within the framework of mutual trustworthiness. As the market manager highlighted this is one of his principles of his management philosophy; however, he has no voice in forming prices. Beyond the manager's attention to fair behavior, informal agreements may happen between vendors with the same kind of produce. For instance, this has happened between honey makers as they agreed on not selling for less than a minimal price they had set before: "There are only plus or minus 10% of differences in honey prices. What usually do is to agree on that nobody goes under a minimum price. We should not spoil the respect and reown of our honey by selling something for 800 Forints if we could get 1500 Forints for it"[8]. Although this rightly arouses suspicions concerning the possible case of forming an illegal price cartel, they much more care about the renown and respect of honey than their offense against the law.

[6] Quote from Horticulture farmer (1).
[7] Quote from Horticulture farmer (2).
[8] Quote from the beekeeper.

What ethnographic observations let conclude is that Szentendre farmers' market is a more or less well organized diverse market. This description let us define this market as a food venue which fits well for the review of studies on alternative and local food systems and farmers' market. Furthermore, findings resonate with the results of Mácsai et al (2012) whose conclusion emphasizes Hungarian consumers' positive and supportive attitude towards direct food sales in certain segments. In my point of view, these research results and the vibrant and healthy atmosphere of Szentendre farmers' market prove that regardless of concentrating tendencies in the Hungarian food sector, direct selling methods still have a niche to fill in. Supportive governmental measures discussed in Chapter 2, in favor of small-scale farmers and farmers' market can also let us assume that the already existing farmers and markets will be followed by new comers and new initiatives.

Chapter 5 Ecological embeddedness through understanding and realizing dimensions

5. 1. Introduction

The following two chapters will summarize the research findings on ecological embeddedness of Szentendre farmers' market. This concept, as it has been introduced in details in Chapter 1, has been developed and conceptualized by Morris and Kirwan (2010) (2011a) (2011b) in order to provide an analytic approach to exploration of influence of ecological characteristics of food producing activities on food exchanges in the context of alternative food networks. The four components of ecological embeddedness after Morris and Kirwan's piece (2011a) are understanding, realizing, utilizing and negotiating on-farm ecological relations. Following this structure, this chapter focuses upon the first two dimensions as they can be directly associated with farming activities and farmers' perception of the market. The next chapter will be entirely devoted to the utilizing and negotiating dimensions since they are rather concerned with information exchange between customers and farmers and producers.

The first section of this chapter has farmers' understanding of ecological relations in their farming sactivities in the centre of focus. To this end, farmers' perceptions will be discussed whether they *understand ecological conditions of their production* and the quality of their produce. Findings on these notions are based on farmers' interviews and talks. It is important to mention that in the lack of considerable knowledge of agronomy and agroecology, researcher was relied on what interviewees said in relation to their production. There was no capacity to do further research additional ecological phenomena and confront their understanding with those.

Moreover, the way farmers and producers' become ecologically embedded will be examined through studying the *instrumental and intrinsic values of nature* in their activities. Discussion will be grounded in interviews and 'stall-talks' with farmers and producers. The lack of more studies on ecological embeddedness that rely on Morris and Kirwan's (2011a) applicaiton does not make it possible to compare my findings with other cases. Missing this body of literature as an aid of empirical experience not only means that this research might provide pioneer contribution to this literature but might have a case adapted understanding of the elements to look for in such research.

In this chapter I will argue that the conclusion of this section, it was identified that farmers and producers proved to be aware of on-going on-farm ecological relations. Simply speaking, they all know what and why they do in order to maintain their activities and benefit from them. However, one could argue that it is fully expected from people whose livelihood is based on these activities. Accordingly, considering their activities as their jobs, farmers and producers are rightfully expected to be aware of these relations. This chapter will be dedicated to identifying these relations in the sense of ecological embeddedness.

5. 2. Understanding on-farm ecological relations and conditions

In terms of the context of their knowledge, farmers' understandings show that their production is restricted solely to their self-created micro agro-ecosystems. These agro-ecosystems vary in a wide range: house plot gardens, outdoor crop fields, greenhouses, 'indoor livestock' and fruit orchards. The most important thing these 'farms' have in common is the fact that they are all meant to be separated from their surrounding ecosystems. Separation might need further explanations before turning to on-going ecological relations. In

the case of a house plot garden, it is clear that the place of farming activities accounts for a few square meters of planting beds in a highly organized arrangement by the reason of the highest utilization of the available land. Fences around the plot might even further strengthen the impression of disconnection from nature, as the surrounding environment and, as a matter of fact, there are not so many interfaces where nature could directly affect the production. In the case of an outdoor horticulture field, the exposure to purely ecological influences is definitely higher than in a small garden, but farming management practices play a significant role in this type of crop production too. Management practices aim to establish, control or improve ecological relations, such as improving soil quality by spreading organic manure or spraying herbicide, but these are all human induced relations under the eye of farmers. In this comparison, greenhouse and 'in-village' dairy farm account for the extreme examples of disconnected ecological relations with nature. A greenhouse clearly symbolizes farmers' intention to provide a fully protected and controlled environment for their crops. Beyond excluding natural circumstances, such as weather, pests or weeds, farmers also aim to ensure better conditions for their plants due to heated up air: "Out in the fields, we use herbicides, insecticides and inorganic fertilizers too but here in my garden and in my greenhouse, there is nothing only the hoe"[9]. In the case of in-village dairy farms, 'in-' indicates that this dairy farm operates right next to the farmer's house in the village. Even though this practice has been always highly conventional in Hungarian villages in terms of ecological disconnection, it needs to be underlined that these barns also embody farm places where external circumstances are excluded as much it is possible.

The only exception from these disconnected 'farm places' is a honey maker with his bee hives. His hives cannot be set up on his house plot because there are not enough flowering

[9] Quote from a horticulture farmer (1).

plants nearby. Moreover, his neighbors would never let him run his apiary so close. Therefore, he is renting a land on the edge of the town (Szentendre) where bees have an unmolested place to do their job. According to the farmer, no human intervention has been made on that land except scything around the hives because of easier accessibility. Anyway, intervention in nature is the least likely thing to expect from a beekeeper as they try not to cut out any plants in the hope of further flowering: "We have to leave nature behind as we were received"[10].The point here is clear: beekeepers rely on nature more than any above mentioned examples.

What this introductory section has made clear is that the way farmers understand the importance of ecological relation seems to be mostly dependant on their management practices and farming skills since there are agro-ecosystems where everything is supposed to be manipulated in favor of successful yield. Question of yield shifts the focus here to farmers' perception of intrinsic and instrumental values of nature since this distinction is also an element of Morris and Kirwan's (2011a) theory.

5. 2. 1. Intrinsic vs instrumental values of nature

Farmers with more intrinsic values pay more attention to environmental benefits regarding their production, while farmers expressing more instrumental values focus more on economic benefits of taking care of nature (Morris and Kirwan 2011a). Similarly to what Morris and Kirwan (2011a) suggest in their piece, research findings show that purely one or the other does not dominate farmers' views. It is more likely to meet both intrinsic and instrumental values present in combination in farmers' perception of their activities.

[10] Quote from the beekeeper.

Farmers at Szentendre market they all emphasized the economic benefits of their farming activities as a particularly important element of their livelihoods. However, motivations differed from farmer from farmer. Selling their produce at the market was a primary income source for a few of them meaning that they do it as a full-time job. In these cases, their livings entirely rely upon successful production and sales. Accordingly, their activities seemed the most professional. Furthermore, in many cases, husbands were helped out by their wives not only in selling at the market, but in the production part as well. The example of the former one is a familial division of labor in which the husband takes care of the livestock and cereal crops, while the wife works with dairy products.

Motivations had a clear supplementary character in the case of farmers and producers in retirement age. However, earnings are utilized in different ways: they may help add something to retirement pension payments or they may be saved to cover particular costs, such as holidays. However, these strategies differ regarding their purpose; there is one thing they have in common: none of them pose the financial burden or risk to their general existence since it is ensured by retirement payments.

Studying these cases from an intrinsic point of view, farmers' perception of environmentally beneficial practices was found to be correlated towards a slightly describable attitude regarding the ecology of their production. Borrowing a phrase from one of the farmers solves this terminological problem as he described this attitude by articulating his philosophy for the efficient and fair production: "The general rule is that only necessary and sufficient steps are taken"[11]. In my point of view, this embodies an attitude in which farmers' way of thinking

[11] Quote from a horticulture farmer (2).

seemingly has certain environmental considerations. This so-called minimal approach includes interventions which are considered to be crucial for a solid and secure yield, but they should not be more than what farmers see as sufficient. The notion of sufficiency was illustrated through three frequent findings. Firstly, using too many inputs, such as herbicides, insecticides or fertilizers, is not economically viable because of their high prices and the low reliability of these agents. Secondly, use of these agents might frighten away the customer who wants to consciously purchase healthy food. And thirdly, farmers' families are fed on their self-made produce, which embodies the best available certification proving that their produce is harmless and safe. In this comparison, two of these three notions seem to shift this environmentally conscious attitude towards the above discussed instrumental values. Too expensive inputs and the possibility of losing customers are, in the end, purely economic considerations.

In addition, farmers on Szentendre Island have their land in an area with sensitive water resources. These water resources provide fresh water for Budapest and the whole region; therefore authorities have a rigorous monitoring system to maintain the clearness of these resources. This will obviously affect farmers growing crops in outdoor fields, especially in case of using artificial fertilizers, once the authorities introduce restrictions. Farmers said that it had already happened in the northern part of the island in a village, called Kisoroszi. Their attitude towards the endangered water resources mirrors again a mixture of the intrinsic and instrumentalist values being present in their decision making. Although they are fully aware of possible threats that artificial fertilizers might pose for groundwater resources, they do not find anything bad about keeping using them. Indeed, playing with idea of having the same restrictions in Pócsmegyer did not make farmers panic: "I do not think that they could exhibit that quite small amount of fertilizer in the groundwater. I think that living next to each other

peacefully is more important: we cultivate the land, they care of the water, otherwise who would compensate my losses if I were not allowed to use fertilizer?"[12]

I observed only two cases that seem to take place at the other end of the spectrum of intrinsic and instrumental values. A young syrup producer and a retired bee-keeper expressed their understanding in relation with a seemingly more conscious way of thinking of nature and their producing methods. The syrup producer man is a qualified gardener and runs a *strictly chemical and preservative free artisan syrup workshop*. His farm and his workshop are located in Dunabogdány on the hills of Visegrad mountains (23 km in the North from Szentendre). He is a full-time employee but he becomes a part-time farmer after work to take care of his orchard and goat livestock. According to him, the syrup workshop is completely self-sufficient in the meaning that he puts back every profit into the production. This reinvesting philosophy is similar to the above discussed retired farmers' attitude as he also keeps the production separate from his family's livelihood. However, there is one sharp difference strongly related to his future plans.

The syrup producer's long-term plan is to start an ecologically self-sufficient lifestyle. His idea is to subsist from his farm which will obviously result in expanding its scale in terms of crops variety, size of livestock and last but not least, turning to a full-time farmer. These plans for his future show an impressive breadth of vision as he can see himself and his neighborhood establishing an autonomous eco-community. He has a strong belief in the incapability of current food provision systems as we know them today; therefore withdrawal from these systems seems a reasonable choice to him. One could say that this idealistic attitude resonates to some extent with the *back-to-the-land-movement* in the meaning of

[12] Quote from a horticulture farmer (2).

Jacob's explanation (1996): "movement of former urban residents who move to the countryside in search of simpler lives in what they perceive as a closer relationship to nature" (Jacob 1996 241). Although going into the details of his motivations does not belong directly to this research, it can be assumed from this attitude that there must be a strong emphasis on environmentally friendly ways of production methods in combination with understanding on-farm ecological relations.

Syrup producer's motivation to keep his production system organic and avoiding using any artificial substances was succinctly summarized in his interview: "There is my heart in it, nothing else!"[13] His conviction about input-free approach is probably based on his opinion on the imperfect conventional food production. He strongly believes that his way is the right way to do this. Regarding his syrup production process, he similarly argued for the use of moderate inputs like horticulture farmers above; however he defined himself towards the more extreme by clearly articulating his voice: Once I calculated how much the annual amount of preservative would be. It turned out that it would be such a big pile of powder that I said: no way I am not going to give this to my customers! I do not want them to eat that stuff!"[14] Instead, he uses a his grandmother's old recipe to make syrups; however, this recipe is so secretive that he did not tell any actual details about it.

Another example of an environmentally more intrinsic way of thinking of the relationship between production and nature was expressed by a bee-keeper man. His and his family's living does not depend on the success of his business either, since this brings only supplementary. This money is either reinvested in the production or spent on recreational activities, mostly on holidays abroad. In addition to this, the fact that he has been quite

[13] Quote from the artisanal syrup producer.
[14] Quote from the artisanal syrup producer.

successful economically, clearly explains the motivation behind maintaining his venture. However, he also expressed the importance of his production from the point of on-farm ecological relations, which may allow one to characterize his case with more intrinsic values. He captures the essence of bee-keeping in a clearly defined way:

> "they say that if bees become extinct then humans are done too. Bees are good indicators to see if nature is doing well or not because, if bees are healthy, then fauna is flourishing as well. And a flourishing fauna can support many other things, like here, bees like alfalfa fields very much. No need to say that alfalfa is an excellent fodder plant and then, this is already a chain in which bees are the smallest parts; however they work the most"[15].

This way of thinking proves that he sees the influences of his bee-keeping activity in a wider perspective as he understands the role of his bees in the reproduction of plants nearby. However, he voiced his resentful feelings towards the fancy ornamental private gardens as well as the disappearing fruit orchards around the town because these reduce the habitat of his bees. His production system will be further detailed in Chapter 5.

To sum up my findings on the understanding dimension in terms of ecological embeddedness, it has become clear that conventional farming activities, such as horticulture farming seemed to present less ecological consciousness in terms of their practices. Their practices aim to maintain ecological relations; however interventions in the form of pesticides or artificial fertilizers usually occur, if only just to a certain extent. Observing this certain extent, it seems that economic considerations tend to overcome the use of purely environmentally friendly practices for minimally secured yields. To me this indicates more instrumental values being present in these cases than intrinsic values. In contrast, few cases expressed more values towards on-going ecological relations and less intention to intervene or alter those for economic purposes. These cases fill a special niche at the market providing artisanal fruit syrups and honey. Understanding the ecology of their production is coupled with either being

[15] Quote from the beekeeper.

aware of the premium quality of their produce or with the significance of their activities in for the wider environment. In order to understand these attitudes in a better way, it is needed go on to the next component of Moriss and Kirwan's (2011a) recommendation, which is the realizing dimension.

5. 3. Realizing on-farm ecological relations and conditions

This section will be structured by going through the most typical features and practices that may hopefully represent how farmers realize their on-farm ecological conditions: "this includes their suitability to localized ecological conditions, the selection of particular breeds of cattle and sheep, and the ecological management of landscape features such as watercourses" (Morris and Kirwan 2011a 327). Accordingly, observations will be discussed in three subsections aiming to cover the most important components of the studied farming activities. These three subsections will be on *land management, selection of seeds, use of inputs*. At the end of this section, accordingly to Morris and Kirwan's (2011a) suggestions, farmers and producers' perception of institutional environment will be presented too. Lastly, a closing section will provide a summary and analysis of findings on the understanding and realizing dimensions. This section will be based on a *comparison* between two very distinct cases: an apiculture farm and a dairy farm. Relying on research findings, these two cases will demonstrate an ecologically embedded and a non-embedded production system. Although both cases have been touched upon above in certain senses, directly comparing them will contribute more to understanding ecological embeddedness in the context of Szentendre farmers' market.

5. 3. 1. Land management practices

Land related issues are mostly concerned with soil quality and specific practices. Almost each farmer's activities are based on soil conditions, therefore investigating how they turn these conditions into their own advantage emerged as a valid question to focus on in the interviews. However, this assumption was disproved, because soil was seen as a clear benefit in the whole production system only in one case.

This case is the above mentioned artisanal syrup producer and his farm in Dunabogdány. Soil quality was emphasized as a concrete element of his production claiming that this makes it possible for him to produce premium quality syrups. He is tremendously proud of his orchard and his produce. His self-confidence is based on the characteristic of his soil that gives a special taste and texture to his fruits. Trees and shrubs specifically prefer this heavy and dense clay soil and this is what makes his crops distinct from other similar produce (crops grown on flat fields with river terrace soils). He may have smaller yields both in size and quantity but what the way of his production requires is exactly this scale and this quality. Allegedly, small fruits are suitable for syrup production because of the better flavor. Being aware of the relationship between the ecology of his production and the quality of his produce was interpreted as a character that he definitely conceptualized as a benefit of his farming activities.

Although horticulture farmers are crucially dependent on soil quality too, this was not expressed as a beneficial element in their production. Farmers on the island have to cope with river terrace sandy soil since the island had been regularly flooded by the Danube before levees were built. They described this soil as a middle quality soil, which needs to be fertilized to keep its quality consistent. Fertilization is achieved by conventional practices

such as either organic or synthetic manure. Farmers prefer the organic one; however it seems that they do not have enough quantity to regularly spread it on their land. Obtaining enough supplies of organic manure is not easily manageable because of the inconstant local accessibility. Scarcity of organic manure makes farmers use synthetic fertilizer too; however they certainly do not go to extremes in using substances: "There is a minimal synthetic manure, but not how Dutch farmers do with spreading in 800 or 1000 kilograms per hectare. We cannot allow spreading out 100000 forints on the land"[16]. Summarizing this, one could say that using fertilizers, either organic or synthetic ones is a highly conventional and accepted practice and could be hardly explained as a unique adaptation to local ecological conditions. Borrowing a phrase from a horticulture farmer succinctly summarizes this section: "We give everything to the soil that it needs to be utilized".[17]

Talking about land management practices, a couple of examples prove that farmers do practices aiming to make their production more suitable to local conditions. I came across a representative example of understanding and realizing dimensions in one particular practice. This horticulture farmer practices crop rotation in his house plot garden. Being aware that crop rotation is certainly not considered as reinventing the wheel, in this comparison this practice is still remarkable and deserves attention. "I think it is an ecological relation that I will not put pumpkin to the same place where I put this year, especially not in greenhouses. It is the same with strawberry, gladiolus and michaelmas daisy flowers. This is something that people learn from practice"[18]. Understanding this character of the soil and realizing it by applying annual crop rotation certainly account for features worth considering as relevant elements of the picture revealing ecological embeddedness of some farmers at Szentendre farmers' market. However, it is important to point out that realization is driven by the relation

[16] Quote froma horticulture farmer (2)
[17] Quote from a horticulture farmer (1).
[18] Quote from a horticulture farmer (1).

between the soil, pests, diseases and crops that pose certain ecological necessities to farmers. Either they figure out how to adapt to this feature or they cannot cultivate anything. This notion will appear in the next example of land management practices.

In the case of irrigation, I observed one type of watering practice being used in two different scales. Farmers practice *flood irrigation* to ensure enough water for their crops both in outdoor fields on the relatively big scale (1 or 2 hectares) and in micro scale house plot gardens on a few hundred square meters. The idea behind this practice is to utilize the perfectly flat land which characterizes the landscape on the island. Excellent quality of water is always available on the island from legal or less legal wells even out in the fields which is quite unusual in Hungary, but fully explained by the proximity of the Danube. Beyond letting the water flood the cultivation, farmers firstly need to make ridges (30 cm high and 15 cm wide) to raise lines of plants preventing them from being entirely covered by water. However, this method has a minor disadvantage: a limitation to regulate the flow of water which may result in a great loss of water if water can be accumulated at the end of the line. Therefore, farmers make small terraces between the ridges in order to prevent water from simply streaming through the lines and over-flooding the end of the lines. With terraces, water can spill over from terrace to terrace allowing enough time for the water to soak the soil. Using this method on either scales, this is a method that has been applied on the island for a long time, however only a handful of farmers are still practicing it. This type of irrigation system seems to suit well the localized ecological conditions including the close water resources to the surface and the flat landscape. The question is rather whether realizing and capitalizing these conditions bring extra benefits to them or not. One can answer to this that farmers completely prove their suitability to localized conditions in terms of irrigation as they work with what they have and actively shape it into suitable conditions. Talking about benefits,

positive outcomes are self-evident considering the fact that they could not cultivate under these circumstances without practicing the flood irrigation method.

5. 3. 2. Selection of seeds

Selection of seeds and breeds became a key issue in analyzing farmers' strategy to realize ecological benefits in their production. Horticulture farmers and the syrup producer's cases provide good examples of seeds, while a dairy farmer family has relevant experience to be discussed in this section.

Studying the selection of seeds is in order to investigate the source of these inputs and the motivation of farmers using them in their production. Sourcing seems to be an easily detectable point since horticulture farmers, the syrup producer or even the herb farmer purchase their seeds from conventional sources such as local farmer or gardener's store or from the national distributor. This is an important issue because it suggests that farmers do not rely on local species. This was demonstrated in farmers' interviews as they could not name any local species, except a few old specific strawberries varieties[19]. Seeds from these sources are commercial products from seed producer companies. They need to purchase seeds every year because saving seeds from plants coming from commercial seeds does not work. They are aware of these as they have all tried to save seeds before. In all cases, the results were smaller harvest with less taste. They all blame the companies for selling these hybrid seeds, which are not open-pollinated, therefore they will never have the same yield next year, neither in size nor in quality.

[19] Szentendre Island was used to be famous for berry plantations in the last century; however, today only a handful of small-scale farmers are still growing these fruits on the island. That is the reason why old species may still part of local memory.

Examinations included the case of local seeds and local sources to see if any left. The most representative example to present place specific species is the local strawberry production. Growing strawberries has a long history on the island, especially in the village, Pócsmegyer. Within the former socialist cooperation, members were involved in strawberry production; however, farmers said that strawberry had been a significant part of living for local farmers even before the collectivization era. This means that this plant was not introduced here as a part of the socialist large-scale agricultural production method. This assumes that growing berries are fully embedded locally; however, most of the farmers have abandoned their fields by now and only a handful of families keep growing strawberries in small-scale operation. These farmers were the sources of anecdotes reporting more than 30 different species of strawberry being used decades ago. The great variety is the thing of the past already because of a few easily detectable reasons which may help understand the lack of local species on currently operating farms.

"There was a great variety of strawberries: some of them huge like a raspberry, while others small, and deep red but so sweet that we called it syrup strawberry. However, that one was not productive to harvest; therefore, it was not attractive economically"[20] This quote from a still active strawberry farmer may properly introduce why farmers stopped using old varieties. Although they might still realize the benefits of certain species, they tend to use only a few kinds because this is how higher yield and higher profit may be secured. Strawberries need to be replanted every 2 or 3 years because they can be expected to give a high yield with a good chance. Farmers re-plant their fields using pre-germinated seedlings, which are usually purchased in a plant nursery located in Dánszentmiklós, in Central Hungary. In this way, stocks are constantly kept refreshed, but it may also result in the disappearance of certain

[20] Quote from a horticulture farmer (2)

species from one year to the next. This disappearing process was demonstrated as follows: "The willingness to save an old variety for its special taste, for instance, works like this: in one year, we say, let's plant a few of them there, but next year we might not, because a new variety with bigger fruits has come in and nobody wants to take care of the old ones, no matter how delicious the old one is. In the long run, old species are just simply disappearing"[21]

Based on interviews with farmers, the intention to capitalize other old and well-known species was expressed only in one case. One tomato variety, called "Fóti tomato" was described as a produce that once had been well-known and that might become a highly popular commodity of the market again since customers still keep asking for this from time to time. It was a favored one because of its big size and garlic-cloves looking shape. Reportedly, this variety was perfect to preserve as tomato paste, which is an essential part of the Hungarian cuisine. Even so, to customers' greatest disappointment, this variety has not showed up at the market for ages. One horticulture farmer has already made efforts to bring back this tomato through a friend who works at a gene bank. Very few seeds were offered to the farmer whose plan was to share them with the local farmer's community. His aim was to ensure a higher chance of survival for those seeds. However, seeds have not arrived so customers still have to wait for this kind of tomato.

In addition, old varieties do not seem realized as a potential way to benefit local conditions. On the contrary, old species were described in the context of possible and avoidable toughness. On the one hand, it is possible because old species might not be resistant enough to modern threats such as certain insects or pests. On the other hand, it is an avoidable risk

[21] Quote from a horticulture farmer (2)

because modern, in many cases hybrid species might present better resistance to these threats. On the contrary, old varieties were also mentioned emphasizing their better resistant or adaptive characteristics: "Why would I work with a new variety of strawberry tree if I have an old in my garden with a healthily thick trunk"[22]. He believes that there is no available variety which could better perform in his garden. However, his attitude to the *old vs new issue* changes on a case by case basis according to the performance and resistance of his bushes and trees. Question of resistance emerges in the context of keeping his production substance free, while more calculable yields may result in replacing old varieties with new ones.

However, it was surprising to see that the procurement of modern seeds takes place in a wholly mechanized way. It is mechanized in the sense that farmers entirely rely on commercial sources. One horticulture farmer always orders the annual issue of the catalog of seeds and crop production products. This book-sized catalog includes everything that is commercially available. However this farmer has been continually facing the problem of making use of this great variety of products: "This is my literature to review. One might want to buy a certain kind of tomato, then here are 30 different substances to spray on it, but we can buy only 3 types because the rest of them belong to Category 1". To use substance from Category 1, he would either need to have an agro-engineer qualification or need to have someone with this qualification to supervise[23]. Even this limited availability of input products is not utilized and capitalized by farmers because, as part of their risk management strategy they tend to stick to well tried, tested and experienced products. This is what has been seen as best suited to the localized condition: "New things always come in but, when you try them out it turns out that they are not as good as they were sold to you. Therefore, we do not start

[22] Quote from an artisanal syrup producer.
[23] According to measures in force, plant protection substances are sorted into three categories: Category 1 and 2 inculde substances whose usage is not allowed for farmers without formal qualification in certain fields of agronomy. Substances from Category 3 may be freely bought.

experimenting with new things because risk factors are too high"[24]. However, decisions to keep sticking to well-known species are certainly based on former experience that had been learnt through experimenting how seeds work under the given local circumstances: "I needed 10 years to find that one variety of cauliflower that I do not want to replace any more. I feel this one suits these conditions perfectly"[25].

5. 3. 3. Use of inputs

Inputs play key roles both in adaptation to localized conditions and in yield improvement practices. Inputs that have not been covered will be presented and discussed in this subsection in order to continue reviewing farmers' efforts to realize ecological benefits from their production. To this end, the following inputs will be touched upon: organization of *labor* and *plant protection products.*

Organization of labor

The organization of *labor* is always a key factor of agricultural production assessment. Labor is a specific element of farming activities since it is unavoidably present in every kind of agricultural production. In terms of understanding farmers' suitability to local conditions, labor might not be the most crucial factor; however, farmers' small-scale production does not allow overlooking how they organize work on their farms. In this case, organization is about division of labor both in production and sales.

[24] Quote from a horticulture farmer (2).
[25] Quote from a horticulture farmer (2).

Briefly, labor organization seems to be based only on family labor. In relation to production, these family-run businesses usually have one or two persons (in these cases, husband and wife) constituting the core of the production. However, there is always a certain division of labor between genders as males do hard tasks such as taking care of animals, driving farm tractors, or dealing with supplies procurement, while females appear to run the processing section such as preparing dairy products, pickles or jams. There are necessarily certain works that involve both males and females such as weeding or harvesting or preparing for the market a day before when produce are packed and put in boxes. These temporary intensive works, which are beyond the daily routine, often require additional help from other family members, relatives or friends. Regarding the nature of these tasks, small-scale farming obviously needs a lot of manual work in every stage of the production: "Mechanization. We are always trying to adapt to modern conditions and trying to make our life easier. However, these peasant farms still do plenty of manual works, because if weeds are coming out, someone has to pull those out"[26]. Accordingly, mechanization covers only a few stages of farming tasks, such as ploughing, spraying, transporting and water pumping. Employing extra work force was always excluded as a possible strategy because nobody could afford it. In order to prevent themselves from hiring people, they tend to solve every task on their own or through barter-transactions. Talking about barter transactions, these are typical phenomena at the market since farmers and producers often exchange their commodities with their own products.

Beyond production, sales at the market give the other half of farmers and producers' tasks. This accounts for a less intense but still very time consuming work. It is so time consuming that farmers articulated the same opinion in relation to attending regularly the market. According to them, those who produce their commodities on their own do not have time to

[26] Quote from a horticulture farmer (2).

attend other markets. Spending half days at the market is often not feasible for farmers if duties call them to the fields. Gender based division of labor may help them out in these cases, since wives can fulfill vendors' role at the market. In normal cases, observed strategies of sharing works at the market include a wide range of variations. The most frequent strategy seemed to be the one in which farmer couples together at the stand behind the stall. This assumes that they are both equally involved in works. Solo vendors, either males or females are also the frequent phenomena; however, this suggests only a few details of on and off-farm labor relations.

Briefly reviewing on and off-farm labor relations have the limited contribution to see how farmers from Szentendre market realize the conditions of their production. Whatever conditions they face, they do not affect significantly how they organize themselves in terms of division of labor. The available manpower is the condition itself that they need to realize and shape their strategies accordingly. However, in my point of view, these strategies cannot be interpreted within the meaning of taking advantages from ecological benefits. Continuing the review of inputs, plant protection substances may provide representative examples of farmers' suitability to localized conditions.

Plant protection substances

Regarding plant protection substances, observations did not bring any findings to state that farmers at Szentendre market apply a characteristic crop protection management. Some attitudes to using different pesticides, herbicides and insecticides have been presented above. What has been concluded is that farmers' routine follows a purely economic deliberation keeping in mind that customers may expect minimally treated produce: "There are some

plants that need to be sprayed but always according to the instructions. I must be cautious about this because I have lots of young mother customers"[27]. Therefore, the use of synthetic substances seems to be a mixture of different motivations: they cannot use more than a certain amount simply because they cannot afford them; even when they decide to treat their crops against weeds, success is not guaranteed because of external factors such as lack of rain; meeting customers' expectations of low-input farming and last but not least, eating the same that they sell certainly sets a limit to over-using these substances. Furthermore, talking about using these synthetic substances, farmers never forgot to mention that organic certified farmers also treat their crops with artificial substances. Comparing themselves to organic farmers made this argument seem to be an excuse for their practice and an explanation why they keep using a certain amount of synthetic plant protection substances.

Beyond synthetic substances, observations came across a few examples of natural treatments, such as natural herbicides and insecticides. These examples showed two different approaches to the uses of natural and more old-fashioned substances. One horticulture farmer brought the lack of time as an explanation for why not to practice these treatments; however, he admitted that common vinegar had worked well against a certain insect both on strawberries and potatoes. Although this is not an organic substance, the farmer at least presented it as an old practice that he will use again if it is needed. One herb farmer lady uses nettle brew to protect her plantation from insects and fungus. Nettle is an easily available weed as it wildly grows almost everywhere, like it does nearby this lady's farm. Nettle brew replaces any other possibly synthetic treatments meaning that her farm closely fulfills the requirements of an organic certification. Her crop management practice underpins this organic production system as she consciously designed oregano lines in her herb garden because it keeps away certain

[27] Quote from a horticulture farmer (1).

insects. The only reason why she does not have an official organic certification is the cumbersome bureaucracy that she might have to face, in the form of unwanted regular monitoring requirements. In addition, the same crop management practice was viewed in a very different way by a conventional horticulture farmer: "I am never into these things. I know that there are varieties which can keep insects away from useful crops but I have never tried such a thing"[28]

Either keeping persistently selecting the best adaptive seeds or understanding the signs of nature and adapting sowing and planting management, these are certainly expressions of realizing local ecological conditions and benefiting from them. However, benefits do not seem to come from entirely local conditions but rather from a combination of on-farm circumstances such as soil and water resources and external inputs such as seeds or plant protection substances. Since the overwhelming majority of observations include these combines practices, both in terms of management practices and use of inputs, the state of ecological embeddedness is not easily classifiable. In other words, observed farming elements that may make a good foundation an ecologically embedded production system have not clearly come out of the observations. After having an overview of the various ways of input use, the next section will shift the focus to off-farm actors, especially off-farm conditions.

5. 3. 4. Perception of institutional environment

Following Morris and Kirwan's (2011a) advice on understanding the realization dimension of ecological embeddedness, the next section will have a brief look at the institutional structure from farmers' point of view. Morris and Kirwan (2010) argue in an earlier piece that in order

[28] Quote from a horticulture farmer (1).

to reconnect producers and consumers within a food supply chain it is needed to ensure higher prices for farmers and more accessible information on origin, quality and safety for consumers. To this end, Morris and Kirwan (2011a) point to "the role of a range of other actors off-farm who may have an interest in supporting the development of ecologically embedded AFNs" (Morris and Kirwan 2011a 327). In that regard, this issue was expected to reveal some fresh experience in responses to recent regulation and institutional changes with similar intentions in Hungary. By way of introduction, findings on this issue partly became in line with these expectations.

The most characteristic articulation of the recent amendments presented in Chapter 2 is almost complete ignorance. Decree for small-holder regulating number of issues from food-hygiene conditions to allowed quantities for selling, amendments in Public Procurement Act, supportive governmental regulations on farmers' markets (Balázs 2012) have not involved farmers and producers as one could expect it before. Farmers have not experienced any massive change either in their production or in market sales. Regarding the increased amount of produce they are allowed to sell at the market annually, farmers seem to be unaware of this amendment. Presumably, these amendments do not involve them in the sense of legalized quantity for selling. The amount they produce and sell has remained unchanged for several years or even has reduced. This yield is usually under the quantity allowed by the law which means that even if the policy makers' intention was to give impetus to small-scale producers, this amendment has failed to achieve its end. Farmers expressed their satisfaction with their current scale and yield, simply because they could not produce or improve more without making necessary investments. These investments could possibly be financed or partly supported by subsidies from the number of sources, therefore it is worth summarizing a few words on farmers' perspective of institutional structures in terms of support.

Whenever application for subsidies or grants was brought up in interviews, farmers responded the same way. They do not even want to attempt to apply for any subsidies because of an easily describable reason: a successful application would cause more difficulties in long-term than it would solve in the short-term. This finding resonates with the conclusion of Juhász et al (2012) in their study on alternative and direct sales channels of Hungarian farmers. They point out that farmers typically do not make use of either state or communal subsidies because they either do not have enough money for the excess or they do not want to make a long-term commitment. Bureaucratic burdens and administrative requirements discourage farmers from these opportunities because: "They would expect us to turn in an account of our profit 3 years back in time. What profit, may I ask, when we are not even recording our bookkeeping!"[29] This quote clearly shows that these small-scale farmers are already in a disadvantageous before even starting filling in the documents for the application. In any case, if their application would be approved, they would face a strict annual audit for the next few years. This would force them to keep at least their bookkeeping in order but farmers do not show too much willingness to fulfill this requirement. Simply because this is it, in most cases they apparently do not give receipts of purchases to customers; even though this is strictly mandatory by law. The reason why they keep taking this risk week by week is that they might get out of the tax-free category if they would record their daily turnovers. This is a pure economic weighing of the acceptable risk and possible gain.

This notion explains why researcher's interest received mistrustful or even suspicious reactions from vendors. My strategy to initiate talks with them was based on making random purchases and, then asking some introductory questions. For understandable financial reasons,

[29] Quote from a horticulture farmer (2)

the costs of these purchases were kept down, so only small purchases were made. Later, in interviews, it turned out that this approach resulted in quite the opposite effects, simply because tax inspectors also start their test purchases with similarly small things. Then, they reveal themselves and unpleasant and awkward moments start. At the beginning of the research, farmers did not know me therefore it is completely understandable why they thought me an inspector.

Another frequently mentioned contradiction is the compulsory membership in the Hungarian Chamber of Agriculture. As it has been mentioned in Chapter 1, farmers have to become member of this institution from last year. For a reasonable annual membership fee, this organization is supposed to perform "duties related to development, subsidies, representation of general interest of the agricultural sector, European Union's Common Agricultural policy and rural development" (Hungarian Chamber of Agriculture 2013). However, farmers have not experienced anything from these services or what is more, they do not even know why they had to join the chamber. From this, it is not surprising if the advisory service of the chamber does not work perfectly: "Try to manage with them to receive the tax refund on your gas costs. I have 8 registration numbers but I still have to ask for permission online. It is incredibly complicated. The nearest place where to turn it in is located in Budaörs (50 km away). That is not in the neighborhood!"[30]

Only the one bee-keeper commented positively on institutional environment, but however, this was the National Apiary Association, not a state or EU funded institution. This organization regularly provides subsidies for its members to reduce their cost of medicine. There is also an apiary supervisory system operating in order to prevent beekeepers from

[30] Quote from a horticulture farmer (1).

infecting each other's families. The locally assigned supervisor conducts a very careful inspection two times a year: "Literally, he examines every bee, one by one"[31].

Although the major focus of the interviews was not on these institutional factors, it is obvious that farmers are greatly dependent on these issues since these constitute the framework they have to work day by day. This framework has been amended driven by clear governmental intention to support localized small-scale food producers and their localized direct sales channels. Looking at the big picture, there is no doubt about the good motives behind the amendments but it tells a lot that farmers and food producers have not heard about these, even though their every days were aimed to be relieved. Indeed, on the contrary, complains about the still great administrative burden came first to mention if difficulties were brought up in interviews.

5. 4. Comparison of two distinct farming activities

The aim of this comparising section is to demonstrate an ecologically embedded and non-embedded production system from the observed cases of this research. Confronting the elements of these two distinct cases through the understanding and realizing dimensions may help us capture the essence of ecological embeddedness. In order, firstly there will be an apiculture farm and related activities presented as the ecological embedded case. Then, this will be followed by a case from dairy farm which is the non-embedded example in this comparison.

[31] Quote from a beekeeper.

5. 4. 1. An apicultural ecology

However. this bee keeper's case has been partly presented above in different contexts, some other elements of his production enables it to be other part of this comparison. In this comparison, his bee making activity is considered as the one which meets the most the conception of ecologically embedded production in this research. Presenting this case in detail might cause repetition of elements that have been mentioned earlier chapters.

Beginning with the roots of his apiary activity, his father-in-law's similar activity and his general love of nature has to be mentioned as early influences. He came under a more direct influence when he inherited his father-in-law's bee hives ten years ago which marks the starting point of his bee keeping activity. These 10 years encompass two years of learning from a bee keeper friend and another three years of learning his own with his own colonies. Over these last years, he learnt through lessons at his costs while there were times when the 70 % of his bee population passed away during resting period in winter. He said that this year was the fifth with a well-balanced profitable system that brings money to his living.

This profitable system includes 50 bee families, 20 in Szentendre and 30 in Esztergom. He emphasizes that in an ideal system he could set up his bee yard at the end of his garden and let his bees collect nectars from flowering-plants nearby. However, it is not possible since people tend to design their gardens without flowering trees, such as fruit, linden or acacia trees. Therefore hives must be placed on the outskirt of Szentendre in order to provide a suitable habitat for his bees. Indeed, he voiced his negative opinion about the recent development of the Danube Bend insisting that it has become overpopulated in recent years. This obviously

has resulted in a great reduction in appropriate lands to agricultural activities including beekeeping.

As he describes, classically beekeeping should be considered as agricultural activities since farmers work with animals in the same way as in dairy or a cattle farm. However, the animals are small and vulnerable and can become ill as well as any other livestocks. Later, honey and other bee products such as beewax and propolis need to be processed and then these have to be sold at the market. In this sense, beekeeping requires as wide a range of skills as many other types of agricultural activities. Continuing this point of view, the farmer also made a point indicating that at least in one comparison, apiculture is different from conventional agricultural activities: a bee keeper has to accept the fact that nature is the ultimate boss.

What it means in respect of beekeeping is the inevitable need to follow and adapt to nature as it is locally. In Hungary this means a natural cycle that includes periods of different plants flowering from April to August and a long a winter period while hives are dormant and beekeeper can work on maintenance of tools. In more detailed, he starts collecting first rape honey in April, then acacia honey, then a few weeks later linden honey. These are pure honeys in the meaning of floral source, but his bees collect blended honey too from flowering fruit trees. This might be flavored honey collected by roaming bees from bushes which may be hawthorn, sloe or hip berries. The collecting cycle ends with sunflower honey and then bees are being prepared for winter resting.

This cycle of available flowers is a certain localized condition that needs to be understood in order to produce different flavored honeys. Since bees keep on collecting over the cycle, beekeeper needs to have the knowledge of currently flowering plants, otherwise bottling and

labeling may turn into a mess: "The nature is the boss!"[32]. Turning to the utilizing dimension, there are some relevant elements of his production that need to be discussed.

Resulting from the nature of apicultural farming, beekeepers need to intervene in nature in order to utilize the above discussed ecological relations. Cultivation in the sense of field works or selection of breeds does not characterize beekeeping, although there are certain practices that aim to help beekeepers' work.

As it has been mentioned above, finding a suitable land for the hives is an issue. Beyond the lack of enough flowering plants, he also has to deal with people's fear and trepidation of bees. Therefore, he had to find places where these issues are not issues anymore. His father-in-law's old bee yard in Esztergom is still in use with 30 bee colonies, but he is keeping 20 colonies in a field on the outskirt of Szentendre. Choice of this place was not driven by any other aspects except the easy accessibility, the suitability and the affordability of this place. As a result, this rocky meadow was found through a newspaper advertisement and fulfills the need to be remote enough from inhabited places. Moreover, rent payments are organized in barter as he pays the annual rent in honey.

Although beekeepers cannot and they do not even want to intervene in nature, they sometimes need to intervene in bees' life applying different practices. These inputs are usually various forms of medications such as antibiotics or herb smokers and serve the protection against certain pathogens. Though he has never had loss caused by diseases he has an extensive knowledge about possible threats. The three most common pathogens that were mentioned are bee mites, moths and foulbrood. First one is a parasite whose entire elimination from hives is

[32] Quote from a beekeeper.

not possible, but their number is controllable by smoking herbal briquettes inside the hives. These briquettes are organic products, but conventional medicines are also available for the same purpose; however he voice a strong opinion about this type of treatments: "This whole bee diseases treatment has become a huge business. The apiary journal is full of medicine advertisements, but I think it is nonsense to spent 50000 forints on medicines. Not because I would not buy them, but they are simple not worth"[33]. Second pathogen is the wax moth which feeds on bee wax and leave larvae on the frames. The only way he can protect his honey from these pests is to freeze the frames before processing starts. Last but not least, the third pathogen, the American foulbrood seems the most severe one since if this disease shows up in a hive, it must be destroyed preventing others from becoming infected.

To sum up this beekeeper's case and its contribution to the research, one can point out that this farmer has no any impacts on the elements of the surrounding environment. This makes him highly vulnerable to on-going ecological relations within the range of his bee yards: "For example, this spring they hardly collected any mixed flower honey because something happened out there and flowers were not there"[34]. What he can sell at the market is a portrait of the surrounding nature including flavors, texture and quantity. In addition, the listed threats above are also considered as localized conditions. Although they do not affect directly the quality of the honey, but failing to take preventing steps may possibly spoil the whole yield. Considering all these features, one could say that apiculture is an ecologically embedded activity in this comparison.

[33] Quote from a beekeeper.
[34] Quote from a beekeeper.

5. 4. 2. An over-controlled dairy farm

This case will be presented as an example to demonstrate an ecologically less embedded farming activity. The further practices will roughly outline a production system in which every element is strictly controlled by a farmer couple. Emphasis will be placed on the use of inputs since reliance on external inputs showed the most extreme end of the spectrum of ecological embeddedness.

This farm with livestock is located on Szentendre Island, in the village, Pócsmegyer. Every facility is on the farmers' private plot. Having everything in one place, such as the barn for the cows, stockpiles of fodder, workshop to process milk means that this is a very concentrated production unit. Although in general, it does not have anything new that classic peasant farms had not had for decades and centuries, in regard to ecological embeddedness it represents an example of the less embedded case of the research according to farmers' suitability to local conditions. It is easily explainable if their production system is looked at a whole: every effort and every practice made on their farm, serve the aim to keep their cows under a proper control and maintain an environment where ecological relations have zero or almost zero influence on the production. In terms of inputs, this production unit requires farmers to take care of everything that is necessary to satisfy the cattle's needs.

Currently, their barn with enough room for 12 cows is occupied only with 4 cows. From the perspective of realization dimension, actually these 4 cows embody the conditions in favor the family has to subordinate every element of the production system. Oversimplifying this system, dairy production is all about taste, quality and animal welfare and they seem to be completely confident of their supreme produce as well as their cattle's well-being.

Accordingly, inputs being used on their farm are supposed to work for this isolated production entity.

As grazing is not feasible because of the lack of available land, the fodder supplies are purchased from other farms, but rigidly not from local ones: "No, I do not buy anything from local farmers because they do not know how and when to harvest alfalfa. If you do it wrongly, cows will not eat it. Yes, our cows are pampered in the meaning that they do not eat anything"[35]. Accordingly, instead of the confidently decried local sources, they seek to find other fodder sources. One of their favorite sources is a farmer in Vértestolna, 80 km away from their village. As she described, that place perfectly fulfills their needs from environmental and professional point of view as well. It is located nearby a National Park which ensures a highly protected and nearly pristine nature: "That land is so environmentally protected that even mosquito aerial sprayings is never taken place there"[36]. Talking about proficiency, this farmer cultivates, harvest and stores alfalfa exactly in a way how these farmers prefer it: "There, he knows that harvesting must be done preferably at dawn and baling must be done by pressing the air out of it"[37]. Otherwise, it will not start maturing and smelling like tobacco that cows like so much". This year, they bought their fodder supplies (alfalfa and hay) from another farmer in Visegrád: "We always seek after nearby sources but if there is no any, we go until we find suitable supplies somewhere"[38].

It might not be considered as a typical agricultural input but it is worth having a look at the barn they keep their cattle. Their cows have the pleasure to stand on rubber carpet covered by wood trimmings. Ash from their stove is often spread over the barn in order to clean and

[35] Quote from a dairy farmer women.
[36] Quote from a dairy farmer women.
[37] Quote from a dairy farmer women.
[38] Quote from a dairy farmer women.

sterilize the floor and prevent the barn from having "animal smell". Moreover, a built-in air blower ensures the proper temperature to the cows in hot summer days. The farmer woman articulates this level of comfort as follows: "Being a cow is better at our place than being a human".[39]

Another input they use is a piece of block that cows are supposed to lick. This product consists of several vitamins, substances, minerals, molasses that cows lose from their body during breast-feeding period. Although it is quite expensive, German import fabric, they would not like to stop using it because it has been working so well. Similarly to this far-purchased special product, cheese culture is ordered form a firm, 200 km away from their farm. These bacteria are crucially important ingredient of cheese and other dairy products making.

Regarding the processing part of their production, they have been doing everything according to what they have learnt during experimenting different recipes and practices. By now, their fixed supply of immature and smoked cow cheese in different flavors, "orda" cheese[40] dairy, yoghurt, whey and obviously cooled raw milk is the fruits of those feeding practices they have acquired and developed on their own. Consciously dosing protein and carbohydrate contained feed for the cattle determine the dry and fat content of their milk: "If we did not care about this, the milk could have a wrong taste. 5 liters of milk can mess up 100 liters. Therefore, we must pay attention to fodder supplies".

Moreover, the way how they ended up with running a dairy farm might be considered as an external input of their activities. Kicking off their farm by investing their wedding present in 2

[39] Quote from a dairy farmer women.
[40] Orda cheese is a mascarpone type cheese made by an old recipe from Transylvania, in Romania.

bulls still sounds as much a reckless adventure as it sounded 20 years ago. Indeed, moving out of Budapest to Szentendre Island in an old peasant house may still make them new-comers in the village. As they were new for the village, dairy farming was new for them as well. Learning the "know-how" could not occur by inheriting the knowledge through intergenerational learning since parents had never been concerned with farming, while grandparents had abandoned their farm even earlier. This has made them to learn everything on their own, drawing on different sources of knowledge: an old local lady's teaching to make dairy products, information exchange with other, but not local farmers and Hungarian and German books about dairy farming and healthy lifestyle.

To sum up their case, this dairy farm, studying from the perspective of ecological embeddedness, demonstrates a production system in which there is not any conditions to adapt practices and use of inputs. Since conditions in this case are entirely created by the farmers. These conditions hardly have anything in relation to local conditions as there is no detectable ecological relation between the production and nature. Their activities cover the maintenance and the improvement of these created conditions. Whatever they do in order to maintain their barn-size micro production system, they obviously do it for the sake of their premium quality and taste produce. Their learning process with every success and failure, demonstrates the creation of something new from zero level. Practically speaking, this farm could be operating anywhere else in the world.

Given these facts, this subsection has been presented a simple comparison between two very distinct cases: an apicultural and a dairy farm. The aim of this comparison was to help capture the essence of ecological embeddedness through direct contrasting. A few sharp differences

have showed the significance of understanding and realizing dimensions in the concept of ecological embeddedness.

The most important conclusion is the revelation of the opposition of an ecologically embedded production system. The brief examination of this dairy farm has resulted in a good contrast to the apicultural farm as it has become straightforward what the difference between an ecologically embedded and non-embedded production system. The sharpest distinction was their differing reliance on ecological conditions in their production. The apicultural farmer has to work with the constant exposure to ecological relations between his bees and the surrounding nature. Obviously, he has no any impacts on these relations except taking care of his bees' health. Unlike bees and flowers, the cattle on this diary farm rely on external conditions and sources instead of localized ones. In my point of view, these external conditions and sources embody a so-called created environment on this farm. Within this created environment farmers exclude every possible unmanageable factor and replace them with highly controlled ones. They do this for the sake of the premium quality produce what they see achievable only in one way: if they put everything in the production except leaving it for the nature like in the case of grazing for example. In conclusion, this pair of cases has showed that ecological embeddedness may be interesting issue within the alternative food network.

The trend that has been sketched here is that ecological embeddedness appears to be rather a continuum than a fixed state characteristc. Two examples have been compared above and it has become clear that even a less embedded production is able to produce value-added produce in great quality, while a more embedded production may have the advantage to utilize the elements which entirely rely on on-going ecological relations. It is the task of the

next chapter to explore whether these advantages are utilized or not. Turning back to the production systems, it has been concluded in this section that the nature of different farming activities determine to what extent they can be ecological embedded into localized ecological conditions. Further task might be to describe fully embedded horticulture farm since this type of production has been appeared to stand in the middle of the embeddedness continuum. However, such a project may probably require further expert knowledge, such as agronomist or agroecological to get involved.

Chapter 6 Presentation of ecological embeddedness through utilizing and negotiating dimensions

6. 1. Introduction

This chapter consists of a combined section of the last two dimensions of Morris and Kirwan's (2011a) concept of ecological embeddedness. These two dimensions of ecological embeddedness are *utilizing* and *negotiating*. Discussing these two components in one chapter was considered to be reasonable since they both involve flows of information between farmers and customers within food exchange processes.

One notion that ties these issues together is the notion of utilization that Morris and Kirwan (2011a) explain as follows: "the various ways in which information about the ecological conditions of production is utilized to influence the exchange process" (Morris and Kirwan 2011a 327). Although the authors particularly emphasize the importance of the relationship between eating qualities and the ecology of production, this issue did not get special attention in this research. This is simply because widening the components of this dimension was considered as a possible contribution to the discourse on ecological embeddedness of alternative food networks.

Similarly, examination of the negotiating dimension will aim to understand the customers' point of view from slightly different perspective than how Morris and Kirwan (2011a) define dimension: "The ways in which consumers negotiate the ecological information they receive about food produce, that in turn influences their purchasing decisions and hence the exchange process" (Morris and Kirwan 2011a 327) This slightly different perspective is the result of a methodological approach that Morris and Kirwan (2010) use in their earlier study. Instead of

conducting focus group discussions with customers, this research relied on a relatively new method, called 'dot voting'. This simple and cost-effective method combines the advantages of a self-administered questionnaire and the personal approach. This type of data collection will attempt to provide empirical evidence to portray the negotiating dimension of ecological embeddedness of Szentendre market. With regard to the depth of data gathered from dot-voting assessment, it was less comprehensive than results gained from a focus group based research would be.

6. 2. Utilizing the ecology of food production systems

The utilizing dimension of ecological embeddedness of Szentendre market will be presented and discussed through the following points: *promotional and marketing materials of farmers, customers' frequently asked questions, elements of vendors' strategy to get customers' attention, relationship between eating qualities and ecology of production*. These will provide an understanding whether farmers utilize the beneficial components of their production to influence customers to choose their produce. To this end, this section will rely on farmers' interviews and participant observations from market visits. Furthermore, in a few reasonable cases, results of dot-voting assessment will be presented in advance to reinforce the outcome of this discussion.

6. 2. 1. Promotional and marketing materials of farmers

The use of promotional and marketing materials was remarkably limited. These tools normally encompass materials from decorations through information boards to 'market-appropriate' clothing. Nevertheless, I seldom came across any consciously formulated

strategy to encourage customers for more shopping. Any kind of material that would serve to inform customers with the name, address or phone number of the farmer or producer was a very rare phenomenon. This let one assume that farmers and producers do not attach a great importance to this way of information exchange: "I have a board with my name in my van but I usually do not take it out. The market manager does not really require this from us"[41]. Although this is the general attitude, a few vendors find it worthwhile to put energy in these boards. In most cases, these are simply home-printed sheet of papers with the most important information (name, indication of small-scale status, location) attached to the front side of the stall.

However, a couple of vendors worked more on their appearance. Homemade designed decoration materials mostly appeared in cases when food processing was the primary activity. Somehow, value-added product producers have been convinced better about the usefulness of these practices, than single raw produce sellers. This might be explained by the additional work they put in their products whether it is a beekeeper's, a fruit syrup producer's, or a dairy farmer's produce. In my opinion, the profound and constant care they exercise day-by-day in their production affects their thinking of promotion and marketing as well. Since their production requires additional work, this additional work appears in their promotion and marketing strategies as well. Nevertheless, these materials rather function as either standard information providing or attention-raising tools rather than a surface to communicate messages about the special ecology of their production systems. Accordingly, these messages may vary as follows: "home-made", "directly from the producer", "list of products". Usually, dairy product sellers and processed meat vendors take advantage of this method in order to promote their chemical and preservative free produce. The most often applied practice is to

[41] Quote from a horticulture farmer (1).

hang on photos of the livestock and the barn. In my point of view, these photos serve as a kind of unofficial certification verifying that the customer faces the real producer and not just a retailer.

In a few cases, efforts have reached an artistic appearance. Labels on the bee-keeper's honey jars were designed by a highly priced artist. Moreover, his jars are from the Hungarian Apiarist Association meaning that they are specially designed honey jars. Although this is a consciously designed promotional strategy, his name and his person stand in the middle of this and not the fact that his honey is made in Szentendre. The artisinal syrup producer uses a seemingly hand-made looking handicraft table-cloth to cover his stall and to inform customers about his produce with a "home-made syrup" embroidery in the middle.

However, these findings do not indicate the conscious act of sharing information about the ecology of production that Morris and Kirwan (2010) seek in their many times quoted paper. There are no examples of emphasizing the place of production, the history of that location or information on how nature makes certain produce delicious and unique. It seems that personal appearance is the only thing farmers and producers rely on as a "tool" to promote their commodities. Customers' frequently asked questions will be examined to further justify this statement.

6. 2. 2 .Customers' frequently asked questions from vendors

The discussion will go on to have a look at the frequently asked questions in order to see whether direct communication situations reveal more from the utilizable information on the ecology of farmers' and producers' production systems. Perhaps the most frequently asked

question was concerned with prices simply because vendors seldom had price tags on their produce. Prices constitute a flexible thing in farmers' marketing strategy simply because they tend to reduce prices approaching the end of the market day. Another pricing strategy is based on the "take more, pay less" principle. Whole boxes of strawberries were sold at a reduced price. It might be because people especially love strawberries, but this persuading strategy was demonstrably efficient in many cases. This may prevent them from taking left-over produce back home, which is a primary aim every market day. Since they all face the absence of cold storage facilities, usually, two things may happen to left-over produce. Farmers may either try to sell them at a depressed price and hope that at least the cost price will be earned or they take the unsold goods back home. In this latter case, depending on the storage life of the crops, they may either give another chance to be sold next time or they get preserved in various ways. Elder farmers often told about old days when left-over crops had been processed and sold as canned pickles or preserve a week after. This practice has been disappearing as farmers from the old generation abandon their activities, especially ladies who used to do these works mostly. In the case of the younger generation, farmers tend to stay with their dominant crops, for instance raw vegetables, and they do not deal with re-utilizing processed left-overs.

To turn back from this sidetrack to the price tags, the research came across an explanation for the absence of price tags with an interesting logic behind it. One farmer said with this practice he aims to encourage customers asking for prices, which he considers as a good starting point of a conversation. Talking about practice, spending several hours with this farmer behind his stall, partly proved his point. In responses to customers' questions regarding prices, he always tried to continue the interaction. When customers seemingly did not like the price, the farmer

always started promoting his produce by emphasizing its values such as fresh harvest or "local product from Pócsmegyer"[42].

Talking about conversations, customers often turn to farmers with this question: "Did you grow these crops?" The affirmative reply might be followed by a second question regarding the location of the production; however, these questions were not witnessed very frequently. Observing another, beloved and popular farmer and his selling practice over a whole market day, only two customers were interested in the source of his produce. The truth of the matter is that this couple of people might be "new faces" who had never bought anything from this farmer, while the great majority of the rest seemed to be loyal purchasers. Furthermore discussing customers' questions, observations never came across any questions asking for information on the use of plant protection substances. The assumption that customers do not care about farmers' treatment of crops was disproved by the results of dot-voting assessment. Introduction of the outcomes of the dot-voting surveys will support this assumption since people's preferences for food produce showed a great interest in input-free characteristics according to the dot-voting assessment. These data will be presented in detailed in the next subsection.

Customers' interests touched upon other notions of farmers and producers' commodities. These questions mostly sought for suggestions and recommendations in the context of cooking. Cooking tips and recipes were asked frequently regardless of age and gender. However, cooking shows on TV were mentioned by a farmer as a direct influence on the high number of young mothers and their learning questions. Questions about certain crops or products could often open the chance of the adaptive learning in the meaning of Milestad et al

[42] Quote from a horticulture farmer (2).

(2010). In these cases vendors had to share why those produce are not available or when they will be available again. These explanations obviously resulted in the vendors had to explain the details of production such as issues with awful weather, seasonality, poor yield or simply quicker customers who came earlier and took everything. These moments always give vendors the opportunity to start story telling about additional details about the tiring harvest, the pregnant cow or old days and old species. In occasions, farmers and producers have a chance to bring their activities closer to customers by sharing actual and current details about it. However, they do not all look eager to utilize this opportunity: many of them started talking to customers about certain issues such as the price of seedlings after customers started complaining about high prices. Story telling served the aim of self-defense, rather than utilizing any element of their production.

Vendors and customers' conversations often covered a completely irrelevant issue as well. Vendors at the market found themselves in a situation that is easily comparable to a combination of a therapist and a good friend. These conversations are about the endless number of issues from elder ladies' complaining about illnesses, through advising on bureaucratic procedures to asking about each others' family. Consequently, one can assume with a good chance that parties in these cases must know each other for a long time, since such conversations must build on a great deal of trust.

As it shows, customers' questions rarely express interest in the farmers' production system in the depth of the ecological details or conditions. If there is any inquiring question, farmers are always glad to answer to them. Seemingly, they understand that this is a great and the only opportunity either to inform their customers about their activities or influence their purchasing decisions. Hesitating people often get finally convinced by tasting the desired crops or

products. Tasting, among the few rules formulated by the market manager, must be allowed for everybody. This seems to be an effective way of pushing people through the line since not so many would refuse such a kindness. To sum up, it is clear that frequently asked questions are rarely interested in the ecology of certain production system.

6. 2. 3. Elements of vendors' strategy to get customers' attention

Vendors' strategies to get customers' attention were also examined in the hope that signs of conscious utilizing behavior will be discovered. Interviews asked the following questions from farmers and producers: "How would you describe your marketing strategy?; What elements do you find the most important in your strategy?". Vendors' responses correspondingly showed the same direction as they found nearly the same things important to mention: honesty about products, respect and politeness towards customers and proper customer service. "If peas are hard today, they are hard. If they are sweet, they are sweet. But I cannot fool people because they will come back next week to complain! However, if I tell them, that these are hard now but they are still good to cook and I might have fresher peas by next week, they might take them! They will come back next week anyway"[43]. This last sentence highlights a crucial element of their presence at the market: direct sales. This works as a permanent guarantee that is always present and always accountable and they all seemed to be aware of this.

In addition, many of them expressed the importance of personal appearance such as the freshly shaved face and ordinary clothes. This was accurately described by a beekeeper: "Clothes must be appropriate to the market, not overdressed or underdressed either. I have

[43] Quote from a horticulture farmer.

tried out how far I might go. I do not want customers to think that my produce is expensive because I look too elegant and stylish."[44] His straw hat and checked shirts evidently suit the atmosphere of the market.

A widely used practice that the research came across was continuous planting. This means that farmers plant their seeds drifting by weeks in time. Due to this method they can sell fresh produce, since crops become ripe week after week all over the season instead of having everything at one time. In this former case they should sell all their produce at once at a possibly depressed price, which would result in a great deficit in their incomes. This practice gives them a minimal room to plan their sales in advance. Continuously providing fresh produce appears as a response to customers' demand and as a challenge to supermarkets' seasonal-free crops, at least in a few weeks of the year.

Getting customers' attention is one point but keeping them and deserving their loyalty seems to be a more difficult challenge. What forged their opinions into a unity: keeping quality high. They all found the consistently high quality is the most important thing in their production: "This is extremely simple. They might have or might not have trust in your produce. If they do not, they will not come back, anyway. The trust is developing through the quality of your produce."[45]

6. 2. 4 .Relationship between eating qualities and ecology of production

Although Morris and Kirwan (2011a) underlines eating qualities as an important element of the utilizing dimension, only partially relevant findings were recorded in this research. Eating

[44] Quote from a beekeeper.
[45] Quote from a beekeeper.

quality as a matter of information was never observed in promotional materials. However, it does not mean that this notion was not present in verbal communication, more specifically: in interactions between vendors and customers. Strategies to promote crops using their certain eating related characteristics seemed to replace the absence of old varieties of crops. It is simply because farmers often promoted their crops according to these characteristics instead of using their official names. Indeed, it is easily understandable in a case of a name like 'K3F1 tomato', that farmers rather use common names such as, "tomato to preserve", "cherry that feels crisp in your mouth", "salad cucumber". Eating qualities will be once examined at the end of the next subsection, since relevant data will be presented there in relation with the negotiating dimension.

6. 3. Negotiating the ecology of food production systems

The second subsection of this chapter will present the negotiating dimension of Szentendre market. Obviously, the entire section relies on data collected from customers as Morris and Kirwan (2010 and 2011) suggest in their seminal paper. However, changes were made in the methodology and, in strong relation to this, in the focus of empirical approach too. Morris and Kirwan (2010) define this component of ecological embeddedness as set of attitudes and purchasing patterns of customers in an alternative food network. In their research, they borrow the term *geographical knowledges* from Crang (1996) to define their research aim: "within this work emphasis is placed on the geographical knowledges that are used to promote the consumption of different commodities, and how these knowledges are constantly shaped and reshaped by a range of actors within the curcuit" (Morris and Kirwan 2010 133). The authors suggest the focus group method to reveal relations between these knowledges and consumption: "These focus groups were designed to examine attitudes and purchasing

patterns in relation to NEFPs (naturally embedded food products) and how these related to wider food consumption practices" (Morris and Kirwan 2010 134). Unlike that project, this research needed to make some methodological changes in order to keep the research objectives of this project on a feasible course. For the sake of feasibility, dot voting assessment was designed and conducted instead of focus groups. Moreover, this affected the methodology since dot-voting assessment gives a limited room to freely phrase questions. Therefore, dot voting questions were more referred to the motivation of customers attending Szentendre market, choosing certain vendors and purchasing particular commodities. This does not make it possible to examine customers' attitudes and purchasing patterns as deeply as focus group sessions could. However, the dot-voting approach is also believed to be a good tool in studying the ecological embeddedness of Szentendre market and may provide useful and practical experience for further research efforts.

Findings recorded from the dot-voting assessment will be summarized and discussed as follows. Firstly, limited data will be presented on the demographic characteristics of customers drawing on the first, introductory question of the survey, vendors' interviews and personal observations. Secondly, the rest of the three questions will be discussed and illustrated in figures. The three questions were: "Why do you visit this market?"; "What influences you to purchase from a farmer?"; What influences you to purchase one product?". Lastly, closing statements will summarize the most relevant findings on the utilizing and negotiating dimension to accomplish the object of this research by completing the picture of the ecological embeddedness of Szentendre market.

6. 3. 1. Brief demographic outlook of customers

The first dot-voting question was designed to portray customers' gender status and to demonstrate where they live. Figure 4 shows that two-thirds of the respondents were female, while one-third was male. Observations reinforce this finding because female customers always seemed to be in an overwhelming majority compared to male shoppers. Furthermore, females customers were always present in two easily distinguishable groups: retirement aged ladies alone and young mothers with their children: "I inherited my mom's customers here. Many of them or their children come down every week. And, now here is the 'baby buggy contingent' as well. They are my acquisition"[46]. One more characteristic that makes them even more remarkable is their usual arrival time. While elder generation tends to go down to the market quite early in the morning, youths usually show up later.

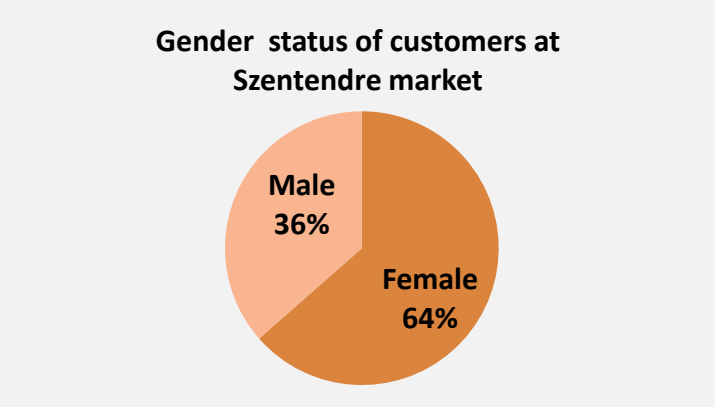

Figure 4 Gender status of customers (N=74)

By giving the postcode of their homes, customers indicated from where they came to the market on the assessment day. Results, as Figure 5 demonstrates, do not cause a big surprise as the vast majority of respondents indicated Szentendre as their home. Furthermore, other 10% of respondents were all from within a 10 km radius[47] of Szentendre. From this

[46] Quote from a horticulture farmer (2).
[47] These places are Tahitótfalu, Leányfalu, Pilisszentlászló and Pomáz.

perspective, one can say that customers outside this neighborhood must have a good reason to attend this market. As it can be identified, people from Budapest so strongly favor this market that they are willing to take this trip every week. The rest of the respondents from even further places are probably on their holiday in Szentendre. This was strengthened by vendors' interviews too as they all supposed their customers mostly coming from Szentendre. Vendors usually labeled strangers as holidaymakers who might have a holiday house somewhere up in the mountains around the town and they purchase food for the weekend at the market. One can assume that if vendors have a stable clientele that is a visible sign of socially embedded vendor-customer relations. These relations constitute the social context of Szentendre market. This issue, among others will be further discussed in the following sections of the chapter.

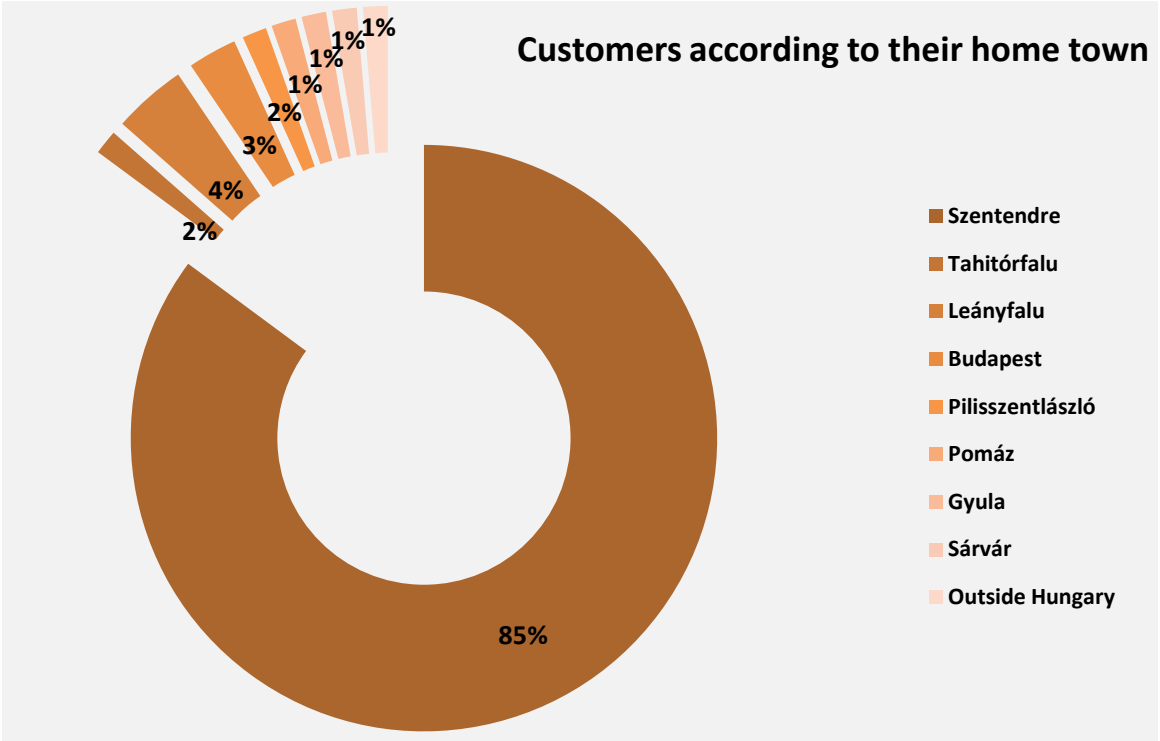

Figure 5 Customers according to their home town (N=74)

6. 3. 2. Motivations, preferences and choices of customers at Szentendre farmers' market

The following three questions were designed in the dot-voting assessment in order to make an attempt to describe customers' perspective in studying the ecological embeddedness of Szentendre market. However, questions were phrased in a way to illustrate customers' viewpoint in a wider context. Customers were asked to respond to 3 questions: "Why do you visit this market?"; "What influences you to purchase from a farmer?"; What influences you to purchase one product?". The logic behind these three questions was to show customers' motivations from the moment of deciding to visit the market, to the moment of purchasing a certain commodity, while notions of ecological embeddedness were hoped to come out too. Logically, the first question is concerned the decision of visiting the market.

Responses to the first question, as Figure 6 details, seemingly show that people have a strong and united opinion regarding what motivates them to attend the market. As it has been mentioned in the methodology chapter, too positive statements might distort the results; however, having four almost totally agreeing statements out of five is still a remarkable result. This may make one assume that mostly the same things bring people out to the market: fresh and local products, the direct relationship with farmers and the enjoyment of purchasing at the market. In terms of ecological embeddedness, it is important to see that people definitely look at Szentendre market as a possible source of fresh and local food. There was one statement that split respondents into groups. A little bit more than 40% of the total votes found prices affordable at the market. However, considering that fact that another 40% of people were not concerned with the prices, one can say that the majority found prices acceptable.

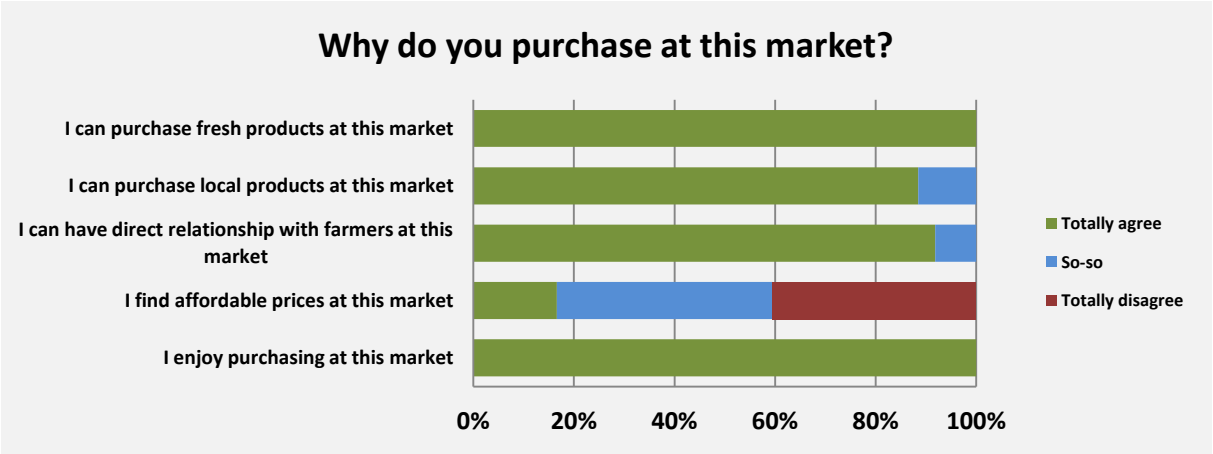

Figure 6 Customers' most important reasons to attend Szentendre market (N= unidentifiable)

Turning to farmers, the second question aimed to examine what influences customers to favor a certain farmer at Szentendre market. Respondents were asked to choose the 3 most important factors which drive them to end up with a certain farmer. Figure 7 summarizes the dispersion of respondents between the possible 8 factors. Results further reinforce that relations between vendors and customers are describable with notions of social embeddedness since there are 4 factors that came before prices. Indeed, two of them are directly concerned with relationships between farmers and customers, while the other two refer to the quality of commodities. The importance of these aspects shows that personal relationship between vendors and customers is a relevant issue in this comparison. This makes a link with certain notions of the literature review. Among many others, these state that direct food sales result in a number of beneficial social phenomena, such as Hinrichs' (2000) special producer-consumer experience and Kirwan's (2006) convention theory.

In relation with studying the negotiating dimension of ecological embeddedness, one can say that the relevant factors (local products, appearance of the product) proved to affect customers' purchasing practices. However, environmentally beneficial production methods seem to play the less significant role in food decisions than one would expect.

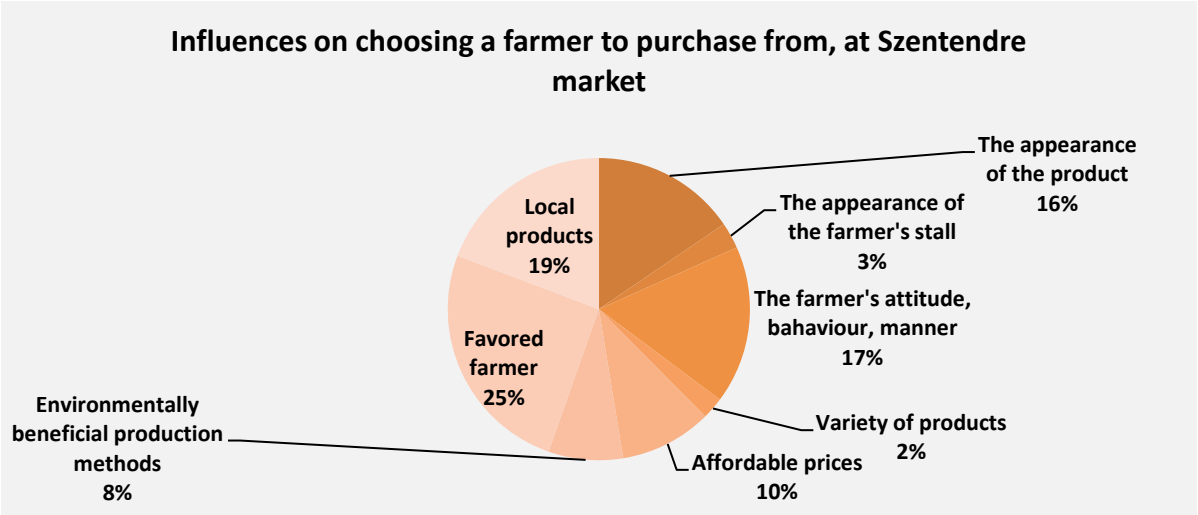

Figure 7 Influences on choosing a farmer to purchase from, at Szentendre market (N=unidentifiable)

Arriving at the last question of the dot-voting assessment, this may give a better look at customers' food choices at Szentendre market. Contrarily to Morris and Kirwan's (2010) suggestions about examining customers' geographical knowledges and the way they utilize these knowledges, this question focused on capturing a general view of the aspects influencing customers on purchasing certain commodities. Figure 8 shows the proportion of responses to following question: "What influences you to purchase a certain product? Please, indicate the most important factor!".The well-known variety and the affordable price came out as the least chosen factors. Apparently, price still does not concern people which matches well with the findings derived from the second question above. Furthermore, the fact that well-known varieties influence people the least in this comparison parallel t farmers' statements on their seed selection practices. As they expressed, old varieties cannot be found at the market anymore, while commercially purchased new ones have professional names. Grounding on this, one can assume that people, especially regular customers are driven by something else in their food purchasing decision.

People seem to have conscious strategies to make choices between commodities. The importance of having locally produced and chemical free food in the shopping baskets

received one-fourth of the votes. Again, matching these numbers with farmers' interviews, both factors seem to be reinforced since they see customers' interest in these features. Indeed, in terms of chemical free produce, farmers' 'necessary and sufficient' approach to growing crops further support these findings simply because they are apparently perfectly aware that customers consciously look for these low-input produce. Beyond chemical free commodities, customers similarly valued the importance of locally produced commodities in this comparison. However, to tell the truth, people were sometimes confused with figuring out what local means in this context. During the dot-voting assessment, questions were often raised to specify the territorial limit of being local. It often turned out that they thought only Szentendre as local.

Lastly, with one-third of the votes, 'taste and texture' was valued as the most influential factor. This means that one-third of the respondents decide to purchase a certain product according to its taste and texture. This obviously brings up further questions. If taste and texture play such a significant role in food decisions, it may mean that they either know that the certain food commodity for a long time and their trust is unbroken or they may rely on their sense of tasting and touching every time. Participatory observations reinforced this assumption; however, this practice changes vendor by vendor. Vendors with processed products, such as cheese or sausage tended to offer their produce for tasting without a word, while horticulture farmers did it less frequently. Obviously the different characteristics of produce limit vendors and customers opportunity to taste, simply because, while a piece of cheese is easy to eat from the knife of the producer, a celery might cause problems. Therefore, tasting is not always feasible, these assumes that taste and texture as a major influence on food decisions are based on long experience in vendors' produce and the quality they represent. It has been presented above that farmers' most important promotional and

marketing tool is keeping their quality high as this is the only way to develop trust and keep their customers loyal. In this meaning, customers seem to appreciate these efforts as their purchasing patterns depend on these eating qualities.

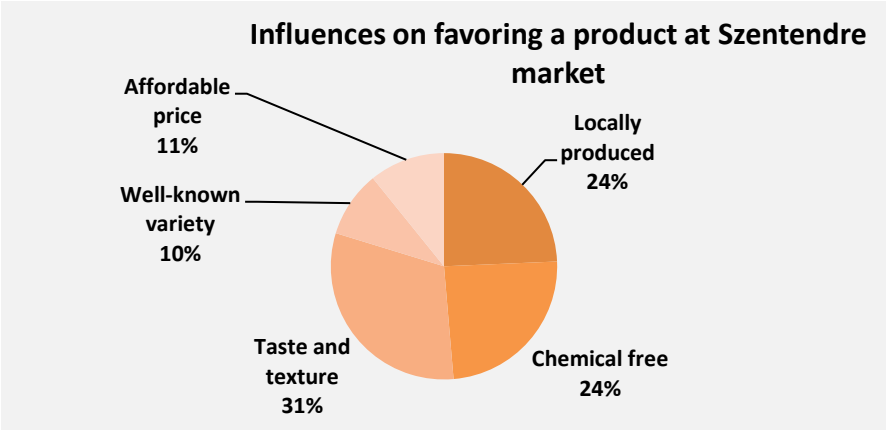

Figure 8 Influences on favoring a product at Szentendre market (N=unidentifiable)

In conclusion, Chapter 6 has made an important contribution to complete the picture of ecological embeddedness by presenting together the utilizing and negotiation dimensions of this concept, partly following Morris and Kirwan's (2010) (2011a) suggestions. Despite facing some methodological limitations regarding the dot-voting assessment, it has been managed to broadly outline on the one hand how vendors provide information on their produce towards customers and on the other hand, how this information influence customers in their food purchasing decisions.

These two dimensions were discussed in one section because both of them examine the flows of information coming from food producers and receiving by customers. It has been shown that vendors at Szentendre farmers' market do not use promotional and marketing strategies and practices which are meant to inform their people about the beneficial elements of their production systems. This seemingly differs from Kirwan and Morris' (2010) (2011a)

understanding of this dimension because they see utilization component as consciously designed strategies which aim to link information on ecological conditions and food quality in order to inform people and make possible customers from people. Instead of these strategies and practices, vendors in this case mostly rely only on personal interactions to get into contact with customers. Indeed, it was concluded from observations that friendly and jovial personal interactions serve as a good medium not just to tell stories about crops and farming, but to exchange information on ordinary, mostly market irrelevant matters. This finding was a great starting point for the examination of negotiating dimension because it highlighted customers' preferences regarding the market, farmers and commodities. The result of this examination showed that customers' food purchasing decisions are driven, motivated and led primarily by personal based notions and food quality. The fact that this resonates with producers' high quality strategy let one assume that food exchange at Szentendre market occurs in a highly personalized place where food quality and loyal trustfulness showed the similar importance and influence in customers food purchasing decisions.

Conclusion

This thesis has discussed whether the relationship of food producers and consumers may be relevantly studied with the tools of ecological embeddedness in the context of a local food system. To this end, a farmers' market has been selected to examine the reconnecting potential of this food phenomenon. Accordingly, the major focus has fallen on the relationship between food producers and consumers through the examination of ecological embeddedness of Szentendre farmers' market, in the meaning as Morris and Kirwan (2010, 2011a) understand and conceptualize this approach.

The major achievements of this thesis will be summarized below. Contrasting Szentendre farmers' market with the relevant academic agro-food discourses and with the context of the Hungarian food sector led this research to an illustrative description of the operation of Szentendre farmers' market. Although, recent studies on local and alternative food systems have focused on new food initiatives, this individual case fits well in this flow of case studies. The recently introduced amendments in the Hungarian regulation system were initiated to target the improvement and development of small-scale food producers, especially those who seek opportunities to sell through direct sales channels, such as farmers' market. Moreover, recent research results have proved that in particular segments, such as Hungarian produce, large number of people favor direct food sales, which clearly shows that these food initiatives still have a niche to fill in the Hungarian food sector.

The relevance of ecological embeddedness in the examination of the reconnecting potential of Szentendre farmers' market is clearly supported by research outcomes, although in some cases, farming activities were not easily inserted into the concept of ecological embeddedness.

It was concluded that ecological embeddedness should rather be studied on a continuum between highly embedded and non-embedded productions. The observed productions in this research had certain elements, such as irrigation practices, old recipes or crop rotation methods, which are explainable as clear adaptation to localized conditions; therefore, they may be discussed within the framework of ecological embeddedness. Beyond these examples, farmers and food producers tend to base their production on practices which aim to exclude or at least control the surrounding natural conditions and replace them with created elements, such as a dairy farm or interventions or the use of inorganic fertilizers. Moreover, findings on farmers' intrinsic and instrumental values of environment showed rather a combination than an extreme representation of these attitudes. Putting together these notions of various production systems one could conclude that farmers and food producers at Szentendre farmers' market tend to manage themselves into a trade-off between pure reliance and a full control of ecological relations.

Strategies and practices how food producers make consumers aware of the details of their production systems are referred to the utilizing dimension, while the ways in which consumers are affected by these strategies and practices are understood as the negotiation dimension within the concept of ecological embeddedness. From the producers' side, research did not reveal consciously designed strategies or practices which were based on the knowledge of the ecology of production systems. These potential promotional and marketing strategies and materials would positively influence food purchasing but these producers' practices only aim to inform customers about relatively simple details, such as price or crops' names or in the cases of artisanal food producers, examples of rustic stall decoration or produce labels were observed. However, none of the observed cases had consciously strategy to utilize the ecology of their production, through detailed descriptions or websites.

The lack of utilizing strategies and practices were explained through the examination of the negotiating dimension. Portraying customers' primary motivations behind their food purchasing decisions revealed the following notions: the characterization of Szentendre farmers' market has more socially embedded than ecologically embedded components. This became clear over the examination of customers' purchasing motivations and the observable social conditions. It was concluded that actors at the market, from vendors through customers, but even the market manager fills in a truly personalized place where purchasing food has a value added nature due to trust based personal relationships. This trust is embodied by the high number of loyal and recurring customers, whose purchasing decisions are based both on their long relationships with certain farmers or producers and their long experience in good quality food produce.

The central interest of this research whether Szentendre farmers' market has any potential to reconnect producers and consumers was clearly shown in this research. However, it also turned out that ecological embeddedness, as Morris and Kirwan (2010, 2011a) understand, has less relevance to explain this reconnection. Instead, it seems that the strength of social conditions affect the development and operation of this farmers' market, not the ecological elements of production systems embedded in producers and consumers' knowledge.

In terms of suggestions for further research focusing on the same issue, broader knowledge of agromony and agroecology could contribute to a more complete understanding of localized ecological relations. This would help researchers to explore the ecological embeddedness of food producers regardless of producers' knowledge. Regarding the methodological suggestions, this project proved that dot-voting assessment is a feasible method for data

collection at public places. The author suggests further researchers to apply this method to similar purposes.

Appendix

Figure 10 Photos were taken over the dot-voting assessment at Szentendre farmers' market on a Saturday market day, 6 July 2013

Reference list

Ángyán J. 2012. Magyar föld, magyar vidék [Hungarian land, Hungarian rurality]. *Magyar szemle* 3 – 4: 121 – 134. URL: http://www.magyarszemle.hu/cikk/20120531_magyar_fold_magyar_videk [consulted 25 July 2013].

Babbie E. 2001. *The Practice of Social Research*. Stamford: Thomson Learning International Division.

Balazs, B. 2012. Local Food System Development in Hungary. International Journal of Sociology of Agriculture and Food. 19: 403 – 421.

Blay-Palmer, A. 2008. *Food Fears – From industrial to sustainable food systems*. Aldershot: Ashgate Publishing Limited.

Broderick, S., Wright, V., and Kristiansen, P. 2011. Cross-Case Analysis of Producer-Driven Marketing Channels in Australia. *British Food Journal* 10: 1217-1228.

Ciolos, D. and Geoghagen-Quinn, M. 2013. Promoting EU Research and Innovation in Agri-food. *EuroChoices* 12: 4 – 6.

Coley, D., Howard, M., and Winter, M. 2011: Food Miles: Time for a Re-Think?. *British Food Journal* 7: 919-934.

Collet, E. and Mormont, M. 2003. Managing pests, consumers and commitments. the case of apple growers and pear growers in the Lower Meuse region. *Environment and Planning* 35: 413 – 427.

Connell,D.J., Smith J. and Josephb, A. 2008. Farmers' markets and the "good food" value chain: a preliminary study. *Local Environment* 3: 169 – 185.

Csatári, B. and Farkas, J.Zs. 2008. Agrarian and Rural Development in Hungary, 1990–2005. In *Contemporary changes of agriculture in East-Central Europe*, ed: J. Banski and M. Bednarek, 147 – 164. Warsaw: Institute of Geography and Spatial Organization.

Csite, A. and Kovách, I. 2002. *Vidéki történet* [Rural story]. In Hatalom és társadalmi változás, ed I, Kovách, 219 – 295. Budapest: Napvilág Kiadó.

Curtis, K. R. 2007. Conducting Market Research Using Primary Data. In *Niche Markets – Assessment and strategy development for agriculture*, ed: M. Cowee. Reno: University of Nevada. URL: http://ag.arizona.edu/arec/wemc/nichemarkets/NicheMarketscompletebook6-17-08.pdf [consulted 21 July 2013].

DeLind, L.B. 2011. Are Local Food and the Local Food Movement Taking Us Where we Want to Go? Or are we Hitching our Wagons to the Wrong Stars? *Agriculture and Human Values* 28: 273-283.

DuPuis, M. and Goodman, D. 2005. Should we go 'home' to eat?: Toward a Reflective Politics of Localism. *Journal of Rural Studies* 21: 359-371.

Edwards-Jones, G., Canals, L.M., Hounsome, N., Truninger, M., Koerber, G., Hounsome, B., Cross, P., York, E.H., Hospido, A., Plassmann, K., Harris, I.M., Edwards, R.T., Day, G.A.S., Tomos, A.D., Cowell, S.J., and Jones, D.L. 2008. Testing the Assertion that 'Local Food is Best': The Challenges of an Evidence-Based Approach. *Trends in Food Science and Technology* 19: 265-274.

Granovetter, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness. *American Journal of Sociology* 3: 481 – 510.

Harcsa, I., Kovách, I. and Szelényi, I. 1994. A posztszocialista átalakulás válsága a mezőgazdaságban és a falusi társadalomban [The crisis of the post-socialistic transition in the agriculture and

rural society]. *Szociológiai Szemle* 3: 15 – 43. URL: http://www.szociologia.hu/dynamic/9403harcsa.htm [consulted 25 July 2013].
Hayden, J. and Buck, D. 2012. Doing Community Supported Agriculture: Tactile Space, Affect and Effects of Membership. *Geoforum* 43: 332-341.
Hendrickson, M. and Hefferman, W. 2002. Opening Spaces through Relocalization: Locating Potential Resistance in the Weaknesses of the Global Food System. *Sociologia Ruralis* 4: 347 – 369.
Hergeshheimer, C. and Kennedy, E.H. 2010. Farmers Markets, Local Food Systems and the Social Economy - A Thematic Literature Review. URL: http://auspace.athabascau.ca/bitstream/2149/2896/1/BALTA%20B5%20-%20Farmers%20Markets%20Lit%20Review%20%28Final%29.pdf [consulted 26 July 2013].
Hess, M. 2004. 'Spatial' relationships? Towards a reconceptualization of embeddedness. *Progress in Human Geography* 2: 165 – 186.
Hinrichs, C.C. 2000. Embeddedness and Local Food Systems: Notes on Two Types of Direct Agricultural Market. *Journal of Rural Studies* 16: 295-303.
Hinrichs, C.C. 2003. The practice and politics of food system localization. *Journal of Rural Studies* 19: 33–45.
Holloway, L. and Kneafsey, M. 2000. Reading the space of the farmers' market: A preliminary investigation from the UK. *Sociologia Ruralis*, 3: 285-299.
_____ 2004. Producing – consuming food: closeness, connectedness and rurality in four alternative food networks. In: *Geographies of rural cultures and societies*, ed L. Holloway and M.Kneafsey 262 - 282. London: Ashgate.
Humphreys, S.C. 1969. *History, Economics, and Anthropology: The Work of Karl Polanyi*. History and Theory 2: 165 – 212.
Hungarian Chamber of Agriculture 2013. *Welcome to the Hungarian Chamber of Agriculture*! URL: http://www.agrarkamara.hu/Bemutatkoz%C3%A1s/WelcometotheHungarianChamberofAgriculture.aspx [consulted July 22].
Ilbery, B. and Kneafsey, M. 2000. Producer constructions of quality in regional speciality food production: a case study from south west England. *Journal of Rural Studies* 16: 217 – 230.
Institute for Prospective Technological Studies 2013. *Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics*. Luxembourg: Publications Office of the European Union.
International Assessment of Agriculture Knowledge, Science and Technology for Development 2009. *Summary for Decision Makers of the Global Report*. URL: www.agassessment.org [consulted 31 03 2013].
Jacob, J.C. 1996. The North American Back-to-the-Land-Movement. *Community Development Journal* 3: 241 – 249.
Jarosz, L. 2008. The City in the Country: Growing Alternative Food Networks in Metropolitan Areas. *Journal of Rural Studies* 24: 231-244.
Juhász A. and Stauder M. 2005. *Hungarian food retailing: concentration, polarization and a new entrant*. Presentation, IAMO Forum, Halle, Germany. 16 – 18 June 2005. URL: http://www.iamo.de/forum2005/files/Stauder%20Juhasz.pdf [consulted 26 July 2013].
Juhász P. 2004. Rurális problémák (kézirat) [Rural problems (manuscript)]. In *Emberek és Intézmények: két zsákutca az agráriumban*, ed: P. Juhász, 573 – 594. Budapest: Új Mandátum Kiadó.
_____1991. Polgárosodás [Embourgeoisement]. *Századvég* 2-3: 181 – 184.
_____2006. *Emberek és intézmények: két zsákutca az agráriumban* [People and Institutions: two dead-ends in the agriculture]. Budapest: Új Mandátum Kiadó.

Kirwan, J. 2004. Alternative Strategies in the UK Agro-Food System: Interrogating the Alterity of Farmers' Markets. *Sociologia Ruralis* 4: 395 – 415.

_____2006. The interpersonal world of direct marketing: Examining conventions of quality at UK farmers' markets. *Journal of Rural Studies* 22: 301–312.

Kovách, I. 1989. *Termelők és vállalkozók: Mezőgazdasági kistermelők a magyar társadalomban* [Farmers and entrepreuners]. Budapest: Társadalomtudományi Intézet.

_____1997. Posztszocializmus és polgárosodás [Post-socialism and Embourgeoisment]. *Szociológiai Szemle* 4. URL: http://www.szociologia.hu/dynamic/9704kovach.htm [consulted 26 July 2013].

_____2003. A magyar társadalom „parasztalanítása" – európai összehasonlításban [„De-peasantization" of Hungarian society in European comparison]. *Századvég* 2: 42 – 67.

_____2012. *A vidék az ezredfordulón : a jelenkori magyar vidéki társadalom szerkezeti és hatalmi változásai* [Rurality on the Millenium: Contemporary structural and power changes in Hungarian rural society]. Budapest: Argumentum.

Kovács, T. 2010. *A paraszti gazdálkodás és társadalom átalakulása* [Transition of peasant production and society]. Budapest: L'Harmattan.

La Trobe, H. 2001. Farmers' markets: consuming local rural produce. *International Journal of Consumer Studies 3: 181 – 192.*

Lawson, R., Guthrie, J., Cameron, A., and Fischer, W. C. 2008. Creating Value through Cooperation: An Investigation of Farmers' Markets in New Zealand. *British Food Journal* 1: 11-25.

Lec, L., Brewer, L. and Stephenson, G. 2007. Practical Research Methods to Enhance Farmers' Markets. In *Remaking the North American Food System*, ed: C. C. Hinrichs and T. A. Lyson, 84 – 98. Lincoln : University of Nebraska Press.

Lev, L., Brewer, L. and Stephenson, G. 2008a. Rapid Market Assessments. *Oregon Small Farmers Technical Report* 6: 2-16.

Lyon, P., Collie, V., Kvarnbrink, E. and Colquhoun, A. 2008. Shopping at the farmers' market: consumers and their perspectives. *Journal of food service.* 20: 21 – 30.

Mácsai, É., Kujáni, K., Juhász, A., Hamza, E. and Györe D. 2012. *A közvetlen értékesítés szerepe és lehetőségei a hazai élelmiszerek piacrajutásában* [The current performance and opportunities of farm-direct sales in the food supply chain in Hungary]. Budapest: Agrárgazdasági Kutató Intézet.

Márkus, I. 1989. *Polgárosodó parasztság* [Embourgeoising peasantry]. Budapest: Dinasztia Kiadó.

Marsden, T., Banks, J. and Bristow, G. 2000. Food supply chain approaches: exploring their role in rural development. *Sociologica Ruralis* 4: 424 – 438.

Milestad, R., Westberg, L., Geber, U. and Björklund, J. 2010. Enhancing Adaptive Capacity in Food Systems: Learning at Farmers' Markets in Sweden. *Ecology and Society.* 15(3): 29.

Millenium Ecosystem Assessment 2011. Food and ecosystem ed R., N. Sampson. In *Ecosystems and Human Well-being: Current State and Trends*, 211 – 244. Washington, Covelo and London: IslandPress.

Moore, O. 2006. Understanding postorganic fresh fruit and vegetable consumers at participatory farmers' markets in Ireland: reflexivity, trust and social movements. *International Journal of Consumer Studies.* 30: 416 – 426.

Morris, C. and Kirwan, J. 2010. Food commodities, geographical knowledges and the reconnection of production and consumption: The case of naturally embedded food products. *Geoforum* 41: 131 – 143.

_____2011a. Ecological embeddedness: An interrogation and refinement of the concept within the context of alternative food networks in the UK. *Journal of Rural Studies*. 27: 322 – 330.

_____2011b. Exploring the Ecological Dimensions of Producer Strategies in Alternative Food Networks in the UK. *Sociologia Ruralis* 4: 349 – 369.

Murdoch, J., Marsden, T. and Banks, J. 2000. Quality, Nature, and Embeddedness: Some Theoretical Considerations in the Context of theFood Sector. *Economic Geography* 76: 107 – 125.

Murphy, A.J. 2011. Farmers' market as Retail Spaces. *International Journal of Retailand Distribution Management* 8: 582 – 597.

Nyeleni 2007. Declaration of Nyeleni. Forum for Food Sovereignty. Mali, Nyeleni. URL: http://www.nyeleni.org/IMG/pdf/DeclNyeleni-en.pdf [consulted 21 July 2013].

Nyéléni 2011. *Synthesis Report and Action Plan. Declaration*, Forum for Food Sovereignty. Austria: Krems. URL: http://www.nyeleni.org/IMG/pdf/DeclNyeleni-en.pdf [consulted 21 July 2013].

Otto, D. and Varner, T. 2005. *Consumers, Vendors, and the Economic Importance of Iowa Farmers Markets: An Economic Impact Survey Analysis.* Iowa: Iowa State University. URL: http://www.leopold.iastate.edu/sites/default/files/pubs-and-papers/2005-05-consumers-vendors-and-economic-importance-iowa-farmers-markets-economic-impact-survey-analysis.pdf [consulted 26 July 2013].

Pearson, D., Henryks, J., Trott, A., Jones, P., Parker, G., Dumaresq, D., and Dyball, R. 2011. Local Food: Understanding Consumer Motivations in Innovative Retail Formats. *British Food Journal* 7: 886-899.

Penker, M. 2003. Mapping and measuring the ecological embeddedness of food supply chains. *Geoforum* 37: 368–379.

Polanyi, K. 1957. *The Great Transformation*. Boston: Beacon Press.

Romsich, I. 1999. Hungary in the twentieth century. Budapest: Osiris Kiadó.

Sage, C. 2003. Social embeddedness and relations of regard: alternative good food networks in South west Ireland. *Journal of Rural Studies* 19: 47 – 60.

Saltmarsh, N., Meldrum, J., and Longhurst, N. 2011. *The Impact of Community Supported Agriculture, Final report*. UK: Soil Association. URL: http://www.soilassociation.org/LinkClick.aspx?fileticket=l3kfHnNhvxg%3D&tabid=373 [consulted 26 July 2013].

Seyfang, G. 2008. Avoiding Asda? Exploring Consumer Motivations in Local Organic Food Networks. *Local Environment* 3: 187-201.

Sinnreich, H. 2007. Baluty Market: A Study of a Food Space. *Food, Culture and Society* 10: 73-84.

Sonnino, R. and Marsden, T. 2006. Beyond the divide: rethinking relationships between alternative and conventional food networks in Europe. *Journal of Economic Geography* 6: 181–199.

Standing Committe on Agricultural Report 2011. *Sustainable food consumption and production in a resource-constrained world. 3rd SCAR foresight exercise*. Brussels: European Commssion.

Stassart, P. and Whatmore, S. 2003. Metabolising risk: food scares and the un/remaking of Belgian beef. *Environment and Planning* 35: 449 – 462.

Swedberg, R. 1991. Major Traditions of Economic Sociology. *Annual Review of Sociology*. 17: 251 – 276.

Szabadkai A. 2010. Jogszabály-módosító javaslatok a vidékgazdaság ösztönzésére [Proposals for amendments to support rural economy]. In *Miért fenntarthatatlan ami fenntartható?*, ed: A. Lányi and G. Farkas 280 - 311. Budapest: L'Harmattan.

Szelényi, I. 1988. *Socialist enterpreneurs : embourgeoisement in rural Hungay*. Cambridge: Polity Press.

UK Food Group 2010. *Securing future food: towards ecological food provision*. URL: http://www.ukfg.org.uk/pdfs/Securing_future_food.pdf [26 July 2013].

Unknown artist, „*Market by the Stream*," ca. 1956, Ferenczy Múzeum, Szentendre. URL: http://kotar.dunakanyar.net/?action=show&id=4&lsz=F01205 [consulted 22 July 2013].

Venn, L., Kneafsey, M., Holloway, L. Cox, R. Dowler, E. and Tuomainen, H. 2006. Researching European 'alternative' food networks: some methodological considerations. *Area* 38.3: 248 – 258.

Via Campesina 1996. *Food Sovereignty: A Future without Hunger*. Rome: Food Sovereignty Forum. URL: http://www.voiceoftheturtle.org/library/1996%20Declaration%20of%20Food%20Sovereignty.pdf [consulted 26 July 2013].

Windfuhr, M. and Josén, J. 2005. *Food Sovereignty Towards democracy in localized food systems*. Warwickshire: ITDG Publishing.

Winter, M. 2003. Geographies of food: agro-food geographies – making reconnections. *Progress in Human Geography 4:* 505 – 513.

Wiskerke, J.S.C. 2003. On promising niches and contrasting socio-technical regimes: the case of Durch wheat and bread. *Environment and Planning* 35: 429 – 448.