



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Scientific Journal

Warsaw University of Life Sciences – SGGW

PROBLEMS OF WORLD AGRICULTURE

Volume 15 (XXX)

Number 4

Warsaw University of Life Sciences Press

Warsaw 2015

Mariya Peneva¹, Yanka Kazakova-Mateva²
Department of Natural Resources Economics,
University of National and World Economy, Bulgaria

Local Food Systems and Rural Development in Bulgaria

Abstract: Recently there has been a renewed interest in alternatives to shorten the food supply chain, allowing more direct links between producers and consumers and localizing food systems. This paper examines alternative local food chains as part of rural development and how to encourage and facilitate their growth in order to contribute to rural vitality and sustainable agriculture. It focuses on some research findings of the Bulgarian team in the project entitled “Farming transitions: Pathways towards regional sustainability of agriculture in Europe” (FarmPath), financed by the 7th FP of the EC. The innovative initiatives that define development of new alternative forms of agricultural local food supply chains, combined with nature-friendly production practices, rural tourism, traditional food production and development of the territory of three rural areas are presented and analysed. The sustainability dimensions that the alternative supply chains may lead up to in the rural regions were also drawn.

Key words: local food system, rural development, sustainable agricultural production, Bulgaria

Introduction

Recently, there has been a renewed and continuously growing interest in alternatives to shorten the food supply chain, allowing more direct links between producers and consumers and localized food systems. This paper examines alternative local food chains as part of rural development, and how to encourage and facilitate their growth in order to contribute to rural vitality and sustainable agricultural production. It presents innovative initiatives (novelties) that define development of new alternative forms of agricultural local food supply chains combined with nature-friendly production practices, rural tourism, traditional food production and development of the territory of three rural areas in Bulgaria.

The agri-food sector in Bulgaria is a key component of the national economy, accounting for over 9.8% of gross added value and approximately 21.7% of employment (MAF, 2014), as in the rural areas the percentages are higher (MAF, 2014). The sector is geographically dispersed with a dualistic structure characterized by a few big farms and a large number of small ones (91% of the farms in the country operate less than 5 ha of land, which results in cultivating 5.2% of the total utilized agricultural area and giving 8.7% of total production volume). Also, it is recognized that horizontal and vertical networks within the food supply chain in Bulgaria are weak. Farmer participation in farmer’s groups and producer organizations is very limited. Most of them, particularly in the fruit and vegetables sub-sector, do not have preliminary negotiations and/or contracts with middlemen, processors, etc. The direct sales of agricultural and food products and local product marketing are in the initial phase and still need to be developed, as do the necessary preconditions, such as market and transport infrastructure, appropriate legislative

¹ associate professor, e-mail: peneva_mm@yahoo.co.uk

² assistant professor, e-mail: yanka.kazakova@gmail.com

frameworks, normative rules, financing and stimulus for small and medium-sized farmers, etc. Moreover, international developments and the accession of the country to the European Union (EU) have strengthened the trend towards consolidation and rationalisation for the other actors of the food supply chain, with an emphasis on integration, specialization and globalization. This model gives advantages to large scale farms and processors, further breaks the traditional direct and local links which existed before, and weaken small shops, butchers, producer markets, etc.

At the same time, in the last five years, there has been a renewed interest and growth in alternative food supply chains, allowing and facilitating connection between producers and consumers in new and more direct ways. Furthermore, farmers have been developing additional on-farm activities in order to increase their incomes and to adapt to consumer preferences. In line with this change of consumer and producer behaviour, a number of farmers markets, farm shops/stands, on-farm shops, community groups, online sales, box-delivery, etc., have been launched and further developed. On the other hand, society has become increasingly interested in the quality and safety of food products and has started questioning the methodologies of the conventional food supply chain related to their environmental and animal welfare effects.

The paper is organized as follows: it begins with an Introduction in Section 1. Section 2 presents a short review of the literature on local food chains, while Section 3 is devoted to the theoretical framework of the study and the research methods used. Section 4 continues with the main socio-economic developments of the three case studies and presents the paper's empirical focus. In Section 5, we present the main findings and analyse the key issues of development of local food chains and their importance for rural region vitality and sustainable local food production and consumption. Section 6 presents Conclusions.

Definition of Local Food System

There is more than one definition of local food systems (LFS) in scientific literature. In most cases, they are defined in opposition to conventional food supply chains and as a new form of food production, marketing and consumption based on an increased link between producers and consumers (personal relationships between the various stages of the chain). Other very important, relevant and commonly used criteria are spatial distances and restrictions to a certain geographic area. It also includes chains where the number of intermediaries between farmers and consumers are reduced to one or ideally zero and which enable identification and traceability of the foods by and to the farmer (information embedded with the product, quality of products, social values [Marsden et al. 2000]. Several forms and examples could be identified in the literature: community-supported agriculture, on-farm sales, on-line sales, farmers markets, delivery schemes (box schemes), collective deliveries in public institutions, etc. In general, they are dominated by small and medium-sized farms and/or microenterprises, producing at small scale. [(Galli & Brunori 2013; Kneafsey et al. 2013; Renting et al. 2003; Schönhart et al. 2009)]

In terms of policy instruments at the EU level, there is no single specific EU labelling scheme (which potentially could bring recognition and more protection to the products and producers). However, there are special tools implemented under the regional/national Rural Development Programmes (including LEADER and thematic sub-programs) to address specific needs, identified in particular in relation to young farmers, small farms, mountain

areas and the creation of short supply chains in each country. They fund local food chain development and are considered important for territorial development. Short supply chains were integrated in the regulation for Rural Development Programmes 2014-2020 by the European Commission. According to that, a short supply chain is “a supply chain involving a limited number of economic operators, committed to co-operation, local economic development, and close geographical and social relations between producers and consumers.” This definition is used for the purpose of this analysis. (Regulation (EU) No. 1305/2013)

Table 1. Summary of the identified effects of the LFS on the three sustainability dimensions

Dimensions of Sustainability	Ecological	Conserving traditional agricultural practices and landscapes
		Reducing specialization and intensification in agriculture
		Reducing environmental effects of transportation and production - lower transport costs, limiting CO2 emissions or packaging
	Social	Preservation of traditional production techniques and consumption patterns
		Keeping small processing enterprises and local traditional food
		Enabling vital small and manageable structures; creating and securing jobs
		Increasing quality (freshness, specific taste, healthier, better nutrition) and security of food
		Rising awareness about environmental and social effects of consumption and consumer behaviour
	Economic	Enhancing personal relationships and community consciousness; strengthening rural-urban linkages
		Better local and international social justice
		Raising income for farmers and food processors; reducing market power of processing and distribution businesses
		Creating employment opportunities, innovation and creativity
		Reducing consumer prices of seasonal products
		Increasing the regional added value

Source: own research.

It is also recognized that LFSs have specific environmental, social and economic impacts at regional and farm level as well as to the consumers. Table 1 provides a summary of the effects cited in the literature [Galli & Brunori 2013; Kneafsey et al. 2013; Schönhart et al. 2009] according to the three dimensions of the sustainability.

Method

The paper focuses on research findings of the Bulgarian team under the international project entitled “Farming transitions: Pathways towards regional sustainability of agriculture in Europe” (FarmPath)³, financed by the 7th FP of the European Commission

³ <http://www.farmpath.eu/>

(EC). The theoretical framework of the project, as well as of the paper, is based on the intersection of the concepts of transition theory and sustainable regional development.

The transition studies are based on the multi-level (socio-technical landscape, regime and niche level) and multi-actor perspectives that emphasize the radical novelty (initiative) that emerges at niche (micro level), carried by “small networks of dedicated actors” [Geels and Schot 2007], and transforms the dominant regime. The regime operates at a meso/regional level and includes technological developments, infrastructure, techno-scientific knowledge, societal groups and networks, rules and regulations, markets, etc. It is also assumed that within the regime several sub-regimes might be distinguished (e.g. production, processing, consumption, marketing, etc.) which might shape various configurations (interaction, interdependence, constraint, influence, etc.). The current paper deals with marketing regime and innovation of the LFSs. The socio-technical landscape (macro level) forms an exogenous environment (macro-economic and demographic trends, macro-political developments, climate changes, societal values, consumer patterns, etc.) and normally cannot influence directly on niche and regime actors, since changes at the landscape level usually take place over a period of decades [Geels and Schot 2007, Darnhofer 2011].

The understanding of sustainable rural development in the paper is based on the above approaches and refers to the changes in farming and marketing activities (such as pluri-activity, diversification and multi-functionality) with the transition studies where the transition process is central and is driven by the niche(s) and their novelty.

In the paper we will not focus especially on the impact of the socio-technical landscape that influences (indirectly) the regime and transition to innovation. We will consider the initiative as multi-actor novelty that may induce changes towards regionally sustainable agriculture and rural development, provoking establishment of new local food chains.

A multidisciplinary approach was followed, including participation of researchers from various fields – economists, sociologists, geographers as well as active participation of the stakeholders at various levels. The research was undertaken in seven European countries: Bulgaria, the Czech Republic, France, Germany, Greece, Portugal and the United Kingdom. Within each country, initiatives reflecting the heterogeneity of agriculture and the diversity of ‘agri-food’ models were selected. Then they were clustered according to their common characteristics and development. [Vlahos et al. 2011] The three initiatives studied in Bulgaria were: 1) cluster Lifestyle farming: Sustainable rural lifestyle in Zhelen; 2) cluster Certification programmes: Integrating rural tourism and local food production for sustainable development in Elena, and 3) cluster High nature value (HNV) farming: New agricultural practices in protected areas in Besaparski hills.

In the case study areas, semi-structured in-depth interviews were conducted with farming representatives, including young farmers and new entrants, local and regional authorities, agricultural officers and experts, NGOs, and entrepreneurs. Documentary analysis and desk research were performed on the contextual analysis and policy related issues. A participatory ‘visioning’ process was adopted and encompassed the following steps: 1) individual semi-structured interviews with each stakeholder representing a) official interests; or b) those who run the land; or c) young farmers; or d) those who benefit from the land; 2) focus group discussions with individuals from the same group to produce visions for the future of agriculture and other land-based activities in each region; 3) a final

workshop with all participants to construct possible pathways to achieve previously defined visions [Pinto-Correia et al. 2014].

Local context

As specified earlier, the three initiatives studied in Bulgaria are: New agricultural practices in protected areas focused on HNV Farming in Besaparski Hills - Natura 2000; Integrating rural tourism and local food production for sustainable development on the case of Elena municipality, and Sustainable rural lifestyle as part of the community supported agriculture initiative in Zhelen. Each of them is located in different NUTS 2 regions in Bulgaria with different types of farming, agricultural production and socio-economic development.

Besaparski Hills is a territory located in the South Central planning region. It is a Natura 2000 site, designated as a Specially Protected Area (SPA) under the EU Birds Directive, and part of the territory is a proposed Site of Community Interest (pSCI) under the EU Habitats Directive. The overall objective of its study is to identify and explore the implementation of various traditional agricultural practices (extensive grazing, low livestock density, no chemical inputs, late mowing, etc.) towards nature protection and biodiversity conservation. The Besaparski Hills lay in the second most densely populated region in Bulgaria. Human activity is intensive and influences the biodiversity in the region. In 2007, the Bulgarian Society for Bird Protection started a project which aimed to conserve important grasslands by encouraging farmers to adopt land management practices sympathetic to the needs of biodiversity. Later, in 2011, the implementation of national agri-environmental measures which encouraged the introduction of environmentally friendly agricultural practices in HNV areas was begun. The implementation of HNV farming practices in the region of Besaparski hills leads to important technological, institutional and structural changes, including stimulus to diversify agricultural activities and develop new local HNV products, and to change local food chains, values and norms, policies and institutional arrangements. The research addresses the complexity of HNV farming as an environmental solution with a broader impact on the economic and social sustainability of agriculture at the regional level [Peneva et al. 2012A].

The municipality of Elena is located in the central north part of Bulgaria. Before the political changes in 1989, relatively big industrial enterprises formed the backbone of the regional economy. Nowadays, new small and medium enterprises – mostly private – have restored traditional businesses and currently operate successfully in different sectors by utilising local sources. The municipality also has a tradition in organized tourism services. In agriculture, the main changes are: renewal and increase of areas with permanent crops; cultivation and collection of wild herbs and mushrooms; livestock breeding and bee-keeping. The studied initiative implemented the idea of integration between tourism and agriculture. Its main aim is to achieve a synergetic effect resulting in sustainable development of the whole municipality as an economic region and territory. Therefore, the initiative focuses on building new facilities for rural tourism, preservation of natural and cultural heritage, recovery of traditional agriculture with special attention to the marketing and certification of local agricultural products [Draganova et al. 2012].

The third initiative promotes the idea of community-supported agriculture. Its main aim is to provide healthy and locally grown food to consumers during the natural growing

season. In exchange, producers receive financial and/or in-kind support during the spring. There is an additional benefit of sharing a lifestyle and production methods that treat environment and nature in a sustainable way. All this is reinforced by the producers' and consumers' understanding that future generations must be able to live in a clean and a safe world, at least as much as we do today. The initiative started in Zhelen village in the municipality of Svoge (46 km from the capital Sofia). The main activities are: promotion of environment-friendly lifestyle, preservation and restoration of natural heritage and traditions, revival and development of crafts and folklore music, and changing the supply chain of local food through encouraging tourist visits and participation in labour-intensive and low-input agriculture, together with enjoying the countryside and experiencing rural living and its people [Peneva et al. 2012B].

Discussion

Over the course of the study, a number of pressures were identified at the macro level (the socio-technical landscape in transition studies), representing the exogenous environment for the three initiatives and indirectly influencing LFS development. In the transformation process, pressures create windows of opportunities for innovations that might be used. For the three case studies in Bulgaria they are: the common awareness for biodiversity protection and nature conservation at regional, national, European, and supra-national levels; as well as a growing consumer awareness regarding food quality and safety, together with an increased willingness for preservation of cultural identity and traditional knowledge (a nostalgic notion regarding the cultural values of traditional farming and tasty food products); integration of traditional agri-food products in the EU rural development and food policies, etc. [Draganova et al. 2012, Peneva et al. 2012A, 2012B, 2014A].

Concerning the LFSs in the case study areas, the regime level (regional level in transition theory) encompasses several sub-regimes: production, processing, consumption and marketing. Within these sub-regimes, different relations between actors were identified: interaction, interdependence, constraint and influence. It is also important that the process of setting up and developing local food chains has been preceded by the process of networking and creation of some bridges between actors within the agro-food regime, and between them and other domains. The collaboration between actors and social links has led to the development of social capital and economic opportunities for local actors.

The niche level of the initiatives is presented by three innovations in local food chains: direct marketing of local food and HNV products, diversification and integration between tourism and local food production, and community-supported agriculture with promotion of traditional foods to new customers. These novelties induce changes towards regionally sustainable agriculture, economic viability and vitality both for farmers and small businesses, and development of the rural areas. This process required new skills and knowledge concerning implementation of good hygiene practices; design skills (jar choice, packing, and labelling); marketing techniques to retain customers and to build long-term relationships, management of sales, etc. It includes learning and collaboration, which are running differently in the three studied initiatives due to the differences in their aims, actors involved, and connections between them.

In the case of Besaparski hills, an NGO was implementing a project and played an important role in the learning process (through organized training, special practices, travel

for international experience sharing, provision of information, advice, and practical tools for farmers). The trainings and learning are central to collaboration and are focused on the implementation of agri-environmental measures and production of local products on the farm. As a result, the knowledge and skills of farmers has deepened – from general awareness to more specific learning of techniques related not only to production but also to marketing, standards and ethical issues.

In the municipality of Elena, new knowledge and skills about information processing and management were developed. The innovativeness is related more to the development of an integrated tourism product, which incorporates local food offers. There are also a lot of organized seminars, events or workshops, which have given possibility to farmers to exchange experience, to learn from each other, to get new information and to establish contacts. From this perspective, organizing joint events is useful, not only to receive specific information on a concrete topic, to exchange experience or to make contacts, but also to promote local food products. Often such contacts lead to agreement on joint activities.

Within the Zhelen initiative, new knowledge and skills are obtained through the nature-agriculture interaction practices such as learning in practice and training (seminars, workshops, etc.) both for local stakeholders and tourists. The initiative fosters the process of exchanging products, art and craft articles between its members and tourists and visitors; and developing new marketing activities, which are more socially and environmentally oriented than economic.

Table 2. Summary of the identified effects of the LFS in the three case studies in Bulgaria on the three sustainability dimensions

Dimensions of sustainability	Ecological	Conserving traditional agricultural practices and landscapes
		Diversification of local land use
		Encouraging environmentally friendly production methods (HNV farming, low input production, organic production, etc.)
	Social	Preservation of traditional agricultural and food production
		Better satisfaction of farmers and producers for personal achievements
		Rising awareness about environmental and social effects of consumption and consumer behaviour
		Building new relationships between various actors of diverse interests at different levels: local, regional and national levels
	Economic	Engaging public institutions in its promotion
		Raising income for farmers and producers; higher selling prices
		Securing new sources of income and creating employment opportunities
		Increasing the regional added value
		Reducing dependencies on intermediaries

Source: see table 1.

Central for the three case studies is shortening the distance between farmers and consumers and advancing the communication between them, thus providing more flexibility and more choices for both sides. Farmers can plan and achieve their goals for sales – better pricing conditions and reducing their dependence on intermediaries; and

consumers can enjoy the taste, freshness and quality of traditionally produced food. Another step in short supply chain development is the application of local certification schemes and engagement in the development and expansion of local festivals, fairs of local agricultural products, traditional foods and crafts, etc. Furthermore, the development of LFSs is a complex issue at regional level and combines quality products, marketing, and rural tourism activities. The diversifications expand the promotion of local heritage and contribute to the regional-specific characteristics of agricultural and rural areas. All these changes create potential opportunities to secure new sources of income and employment in rural areas, as well as opportunities to increase the viability and the long-term sustainability of farm enterprises. Another important effect of the initiatives' development is the increased confidence of farmers in their work and place in the community as a result of their involvement with local food marketing activities.

Finally, the sustainability dimensions of the alternative local supply chains of the three initiatives are drawn. They are based on the normative framework of sustainability and its analytical concept generally consisting of an ecological, economic and social dimension. Table 2 provides a summary of the effects identified in the case studies.

Furthermore, some unfavourable issues are identified as hindering factors for LFS development in the case studies, which need to be addressed by all stakeholders. These are: marketing channel limitations due to variation in product quality and small quantities of produce; lack of adequate consumer information both in terms of quantity and quality; absence of strategic promotion of the study regions; limited access to financial sources for investments; legislation and policy support regulations.

Conclusions

The critical analysis of the three case studies have shown their complexity and diverse character, which is in accordance with the literature and the lack of a single definition of LFS. The identified effects on rural development and sustainable agriculture depend on the specific circumstances of each case, taking into account the different patterns of production, consumption, goals and actors involved. Nevertheless, the successful implementations of these differences show the potential of short supply chains to address the complexity of LFSs and interactions between society, nature and economy. In this regard, further studies are needed to identify the problems and formulate recommendations on possible marketing strategies; strengthening consumer-producer relations; investments in infrastructure and farms; improvements in legislation and regulations; setting up certification processes; advancements in trainings and extension services.

References

- Darnhofer Ika [2011]: Initial Conceptual Framework. FarmPath working document.
- Draganova M., Peneva M., Kazakova Y., Mishev P. [2012]: Case Study report: Rural development based on sustainable tourism and local food production: The municipality of Elena, FarmPath working report.
- Galli F., Brunori G. (eds.) [2013]: Short Food Supply Chains as drivers of sustainable development. Evidence Document. Document developed in the framework of the FP7 project FOODLINKS (GA No. 265287). Laboratorio di studi rurali Sismondi, ISBN 978-88-90896-01-9, [Available at:] http://www.foodlinkscommunity.net/fileadmin/documents_organicresearch/foodlinks/CoPs/evidence-document-sfsc-cop.pdf.

- Geels F., Schot J. [2007]: Typology of sociotechnical transition pathways. *Research Policy* 36: 399-417.
- Kneafsey M. et al. [2013]: Short Food Supply Chains and Local Food Systems in the EU. A State of Play of their Socio-Economic Characteristics. EC Report, [Available at:] <http://ftp.jrc.es/EURdoc/JRC80420.pdf>.
- MAF [2014]: Agricultural Report 2014, Ministry of Agriculture and Food of Bulgaria.
- Marsden T., Banks J., and Bristow G. [2000]: Food supply chain approaches: exploring their role in rural development, *Sociologia Ruralis*, Vol 40, No 4, pp. 424-438.
- Peneva M., Kazakova Y., Draganova M., Mishev P. [2012A]: Case Study report: High Nature Value Farming in Besaparski Hills (Natura 2000), FarmPath working report.
- Peneva M., Draganova M., Mishev P. [2012B]: Case Study report: Countryside Consumption Cluster, Community Support Agriculture in Zhelen, Bulgaria (Solidarno), FarmPath working report.
- Peneva M., Draganova M., Gonzalez C., Diaz M., Mishev P. [2014A]: "High Nature Value Farming", Transition Pathways Towards Sustainability in European Agriculture. Edited by: L-A. Sutherland, I. Darnhofer, G. Wilson and L. Zagata, pp 97-113, CABI publisher.
- Peneva M., Kazakova-Mateva Y., Mishev P. [2014B]: High Nature Value Farming for sustainable local food production and consumption, EAAE 2014 Congress: 'Agri-Food and Rural Innovations for Healthier Societies', August 26 to 29, 2014, Ljubljana, Slovenia.
- Renting, H., Marsden T. K., Banks J. [2003]: Understanding alternative food networks: exploring the role of short food supply chains in rural development. *Environment and Planning*, vol. 35, pp. 393 – 411.
- Regulation (EU) No 1305/2013 of the European Parliament and of the Council on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and repealing Council Regulation (EC) No 1698/2005, [Available at:] <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32013R1305>.
- Schönhart, M., Penker, M., Schmid, E., [2009]: Sustainable local food production and consumption: Challenges for implementation and research, *Outlook on Agriculture*, Volume 38, Number 2, pp. 175-182(8).
- Pinto-Correia, T., McKee A., Guimarães H. [2014]: "Transdisciplinarity in deriving sustainability pathways for agriculture", Transition Pathways Towards Sustainability in European Agriculture. Edited by: L-A. Sutherland, I. Darnhofer, G. Wilson and L. Zagata, pp 171-188, CABI publisher.
- Vlahos G., Karanikolas P., Tsakalou E. [2011]: Evaluation Matrix with Final Selection of Initiatives. FarmPath working document.