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# AN ASSESSMENT OF THE DEVELOPMENT POTENTIAL OF SHORT FOOD SUPPLY CHAINS IN THE IAȘI COUNTY

### ABSTRACT

At present, short food-supply chains (SFSCs) are an economically viable alternative to globalized agri-food circuits and have an ever increasingly important role in local supply networks. SFSCs are varied in nature and practice and effectively provide many economic, social, cultural, environmental and, last but not least, community benefits. The specific soil and weather characteristics of Iaşi county make for a wide range of agricultural and agri-food products – ranging from grains, industrial crops, fruit and vegetables to processed products. In the first quarter of 2017, according to the data provided by ANSVSA Iaşi, more than 3,400 units producing, processing and marketing animal and non-animal products were operating in Iaşi county, most of them located in Iaşi county area. A large part of production is sold on Iaşi market, through SFCSs, under various forms: producer shops, farm gate vendors, specialized shops (grocery stores, butchers` shops, meat deli shops, greengrocers' shops, etc.), on the agri-food markets, on-line stores, Facebook groups, as well as in supermarkets. The present case study aims at emphasizing the importance and reliability of the existing SFSCs in the agri-food sector of Iaşi county.

Key words: short food supply chains, agri-food products, Iași county.

JEL Classification: Q13, Q11, O13, M31.

#### **1. INTRODUCTION**

Having acquired an innovative status, the local agri-food system is a specific research area currently requiring a more in-depth approach, due to the dynamics it has recently proved. It can be noted that the issue has not been properly addressed from a socio-economic and legal perspective, so as to obtain an improvement of the characteristics of the local agri-food system (Kneafsey *et al.*, 2013; Tanasă, 2014).

In the last 20 years, the EU's Western developed economies have reconsidered the short food supply chains (SFSCs), which are now widely regarded as innovative solutions for sustaining local agriculture systems, ensuring the rural communities` sustainable development, contributing to healthier food consumption and to increased consumer awareness. By contrast, in a series of emerging economies now part of

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the European Union (Romania in particular), before 1989, SFSCs were a "crisis" solution for the urban population, whose access to food was severely limited due to the state authorities' decision to massively export (Tanasă, 2015).

### 2. STATE OF KNOWLEDGE

By reviewing the current literature on "Short Food Supply Chains" (SFSCs), one can note that an unanimously accepted official definition of the SFSC/LFS concept is not yet available. For instance, the UK's Soil Association (2001) considers that the local food systems (LFS) should be considered as "a system of producing, processing and trading, primarily of sustainable and organic forms of food production, where the physical and economic activity is largely contained and controlled within the locality or region where it was produced, which delivers health, economic, environmental and social benefits to the communities in those areas" (Tanasă *et al.*, 2016).

	Environmental protection	Economy		
	supporting wildlife conservation	supporting local economies		
	encouraging small farmers to adopt more eco-friendly production systems	increasing the incomes of local producers as well as increased retention of money within the local cconomy	Social environment	
	contributing to the conservation of air, soil and water resources including reduced pollution	stimulating E.U. funds absorption in local communities	maintaining local employment and generating greater employment opportunities	
Health and well-being	reducing fuel consumption and GHG emissions (carbon footprint)	developing entrepreneurial spirit	contributing to an increase in job satisfaction and organizational capacity within rural communities	
encouraging the consumption of fresh, nutritious produce	food waste reduction	supporting local tourism-related activities	countering the migration of the active labour force	Culture
improving diet and health hrough increased access to Jocal nutritious food	promoting education on sustainability and environmental issues	supporting local shops and farmers' markets	supporting the direct interaction between end-consumer and producer	promoting and maintaining the local gastronomy
promoting youth-targeted health food education	nature friendly attitude	encouraging the setup and development of local partnerships between different businesses	encouraging skills transfer and training	maintaining rural cultural heritage

Source: Tanasă et al., 2016.

Figure 1. Benefits of short agri-food chains in rural areas.

The SFSCs are those food chains with as few as possible intermediaries, the ideal being a direct contact between the producer and the consumer. Considering several definitions of the concept, in its *"Short Food Supply Chains and Local"* 

Food Systems in the EU. A State of Play of Their Socio-Economic Characteristics" the European Commission considered that "the foodstuffs involved are attested and traceable to a certain local farmer. The number of intermediaries between farmer and consumer should be 'minimal' or ideally nil" (Marsden *et al.*, 2000; Renting *et al.*, 2003; Kneafsey *et al.*, 2013). One can thus note that the local products are therefore the main element in setting up short chains, whereas "local" means the minimum unit of origin description (European Network for Rural Development, 2013).

According to the National Rural Development Program 2014–2020, in Romania the local market is defined as being positioned within a marketing area that does not exceed 75 km from the farm where the product originates (Ministry of Agriculture and Rural Development, 2015). At the European level, the innovative nature of SFSCs is also revealed by numerous research projects implemented in recent years: SUS-CHAIN (FP5, 2003–2006), FAANWEB (FP7, 2007–2010), SUPURBFOOD (FP7, 2012–2015), FOODLINKS (FP7, 2011–2013), FOODMETRES (FP7, 2013–2015), GLAMUR (FP7, 2013–2016), TransMango (FP7, 2014–2018), DIVERSIFOOD (H2020, 2015–2019), etc. (EIP-AGRI, 2015).

#### **3. MATERIAL AND METHOD**

In the introductory part of the article, the indirect research method has been used – the study of various important articles and research published in this field. On reviewing the research literature on SFSCs, one can easily see that statistical data can be identified only at the level of individual case studies, most articles and studies containing mainly qualitative data. An overview of the existing literature has been conducted in relation to SFSCs and local food systems.

In addition, data and information on currently active economic operators (processing/selling units) registered at the Iaşi Sanitary Veterinary and Food Safety Authority (S.V.F.S.A. Iaşi) have been used. Available on-line data sources regarding small-scale farmers actively promoting local SFSCs have also been included. In order to better understand and correctly evaluate the topic under investigation, we visited not only various open agri-food markets but also a couple of different agri-food producers running their businesses in Iaşi County. Our aim was to locate as many as possible active SFSCs across the county area, given the timespan and the available resources.

Moreover, a focused on-line search was carried out in order to identify further active agri-food sector producers in Iaşi county who sell local products via the Facebook Group suggestively named "Iaşiul vrea produse locale", which translates as "Iaşi City wants locally-sourced products". Thus, the SFCSs assessed as feasible solutions at least according to our point of view were added to the database to update it.

### 4. RESULTS AND DISCUSSIONS

As previously noted in several of our scientific papers, a situation currently deplored by many authors in the field is that despite its considerable potential (approx. 9.4 million hectares of arable land), Romania's agricultural sector is still adversely affected by many drawbacks, including low labor productivity, fragmented agricultural holdings, underused land potential, lack of adequate storage and processing units, internal and external migration of skilled workforce and lack of access to financial resources.

By assessing the current overall situation of the agricultural sector in Iaşi county, one can note:

- the characterization of Iaşi county as being a predominantly agricultural administrative unit can be reasonably accepted, given the large number of active agricultural holdings, according to official statistical records provided for the year 2014: a total number of 138,393 farms, out of which only 866 had legal status, while the other 137,527 agricultural holdings were registered as not having legal status;

within the county area several important units of the Romanian agriculture sector are conducting sector related operations, such as: "SA Moldova Ţigănaşi" – 3,766 hectares, "SC Agricola Prut" – 3,426 hectares, "SC Agrocom Strunga", "SC Panifcom SA", "SC Agralmixt SA", "SC Cotnari SA – 1,993 hectares, "SC Gherghiceanu S.R.L." – 1,807 hectares, "SC Agro Verd" – 1,500 hectares and "SC Agrofruct Plugari" with 1,500 hectares;

– in terms of turnover in the year 2016, the most important companies operating in the agricultural/agri-food sector were the following: "SC Kosarom SA" – 166.4 million RON, "SC Cotnari SA" – 139.1 million RON, "SC Fermador S.R.L." – 121.8 million RON, "SC Avi-Top SA Războieni" – 58.4 million RON, "SC Ferma nr. 1 Bivolari S.R.L." – 47.2 million RON, "SC Agricola 96 Țigănași" – 44.5 million RON, "SC "Agrimarvas S.R.L." – 32,9 million RON, "SC Agrocomplex Lunca Pașcani" – 27.7 million RON, "SC Panifcom SA" – 24.5 million RON, "SC Tagro Grup S.R.L." – 11.9 million RON and "SC Agrocom Strunga SA" – 11.7 million RON;

- it is worth mentioning that in 2016, Iaşi county was the second largest supplier of pork in Romania, given the overall output of over 33,100 metric tons. In the same year, "Marcel S.R.L." and "Kosarom SA" – Paşcani were among the most important exporters of cold cuts and meat preparations in Romania;

- "Avi-Top SA", a subsidiary of the larger "Kosarom Group", was one of the main economic actors operating in the poultry meat industry in Romania, with a total of about 6.5 million hens/chickens, according to the 2016 data provided by the Embassy of the Netherlands in Bucharest. In the same context, it can be noted that SC Fermador S.R.L had a very good market share, with over 120 million RON turnover;

- in the wine sector, "Cotnari SA" emerged as the largest wine producer in the North-East Region of Romania, and the second largest at the national level, being surpassed only by Jidvei S.R.L. (www.analizeeconomice.ro, 2017).

- in the niche sector of yeast production, the Paşcani based "SC Rompak S.R.L." was registered as the largest supplier at national level, given its output of about 30,000 metric tons per year and its turnover of 99 million RON according to its financial statements;

- the benefits arising from the "Agroindustrial Park" located in the commune Leţcani, the establishment of the "Agro Farm Cluster" and the organization of the largest regional agricultural fair "Agralim" stand out, last but not least, as relevant key assets.

When analysing the agri-food sector of Iaşi county, one can notice that the local producers are present on the local, regional and even national markets. As a positive development, besides the establishment of various early forms of association in the rural communities of Iaşi county, concrete actions and measures were undertaken, aimed at supporting and promoting small local farmers and SFSCs implicitly. A case in point concerns the recently established Facebook Buyers` Groups, created with the precise aim of promoting healthy eating, fair trade and small local/craft producers. Moreover, the virtual communities spawned by the Facebook social network amounted to more than 55,000 members in 2017: "Iaşiul vrea produse locale" (Iaşi wants local products) – 22,000 members, "Iaşiul vrea produse naturale" (Iaşi wants natural products) – 20,500 members, "Iaşiul vrea produse naturale din gospodării" (Iaşi wants natural products from peasants' households) – 2,500 members, "Grupul micilor producatori locali şi iubitorilor de produse tradiționale" (Small local producer and traditional product lover group) – 6,100 members, "Iaşi-Alimentare-Premium" – 4,500 members).

According to statistical data available for the year 2017, provided by Iasi Sanitary Veterinary and Food Safety Agency, out of total 3,471 officially registered economic operators such as processing units/sellers (not including hypermarkets, supermarkets, grocery stores or other retail outlets, warehouses, bars or packing/bottling units), 3,044 were local processing units delivering food products of animal origin, whilst 427 units were specialized in processing/selling products of non-animal origin. Most of these units active in the food retail sector were using selling methods and practices specific to SFSCs. Out of the 427 local units delivering food products of animal origin 27 were butchers, 74 meat suppliers, 438 on-farm milk processing plants, 5 off-farm processing plants, 13 raw milk vending machines, 15 aquafarms, 26 fisheries, 2 centres specialized in extracting, collecting and supplying bee honey, wax and other bee products, 1,063 bee-keepers, 56 honey bee colonies/man-made beehives, 8 honey and honeybee derivatives shops, 2 poultry egg collecting centres; 764 restaurants/fast-foods/fastfood trailers, 61 pizza shops, 189 canteens, 98 pastries & bakeries, 48 pastry shops, 67 food cart vendors; 62 catering units and 26 tourist accommodation units.

As for the units specialized in processing/selling products of non-animal origin, according to data from the same agency in Iaşi county there were: 74 bakeries, 232 confectioners (bread-makers included), 27 grain millers, 1 breakfast cereal supplier, 7 pastry shops (biscuit, cracker and similar), 13 fruit and vegetable processing plant, 10 small-scale fruit & vegetable juice plants, 1 potato processing plants/storage facility, 3 manufacturers of chocolate/cocoa (and other sugar based products), 2 specialized units in vegetable oils and fats processing, 2 small-scale spice processing plants, 4 tea/coffee processing units, 2 alcohol processing plants/ethyl alcohol of agricultural origin suppliers, 16 wineries, 1 brewery (craft beer), 2 ice-cream micro-factories, 3 frozen foods units, 4 fresh beverage plants, 1 spring water bottling plant, 1 water bottling plant, 7 commercial mushroom growers, 14 produce processing/packaging factories (Iaşi S.V.F.S.A., 2017).

The meat industry is well represented in Iaşi county in terms of animal slaughtering units, given the high number of animals raised on large-sized farms, as well as the number of specialized local shops that are concentrated mainly in the city of Iaşi (producer-owned retail outlets, butchers, meat suppliers, grocers, etc). A particular feature of the local meat industry is the large number of small-scale agricultural holdings that run partnerships with large and well-known producers operating businesses in the area.

With respect to the different marketing promotion strategies as well as status and brand image, it can be noted that in particular "Kosarom", with 50 producerowned retail outlets, "Fermador" (21 producer-owned retail outlets, 8 of which are in Iași), "Marcel" (17 producer-owned retail outlets, 8 of which in Iași County) and "Ferma nr. 1 Bivolari" have sizeable market shares, both at local and regional level. These stores are located mainly in high traffic areas, in densely populated areas, close to agri-food markets, and even in supermarkets/hypermarkets and other important commercial areas. The largest part of production is currently marketed locally/regionally/nationally, but in recent years an emerging trend of expansion on the foreign markets has been registered. Every major producer showcases a premium range of high quality products, thus complementing their wide-range/serial products. Examples are "Marcel S.R.L." that owns the brand "Gospodina"; "Kosarom SA" sells their premium quality food-products exclusively under the "Bunătăți de la Bădia" and "De Acasă" trademarks; "SC Morandi-Com S.R.L." and "SC Vanbet S.R.L." are selling the brands "Puiul Gospodarului" and "Puiul Haiducesc", respectively. Thus it can be stated that the big meat industry producers are well adapted to market conditions and requirements, covering not only the low-income consumers market but also the top consumers.

Butchers and meat suppliers ("Marcel", "Kosarom", "Fermador", "Iaşicarn" – 5 stores, "Ana şi Cornel" – 4 stores, "Meat Concept" – 2 stores, "M&R" – 6 stores, "Frankly", "Carmangeria Ta", "La Cuțite", "La Titi, "Ana Carn, "Lee's, "Ferma 2 Cocoși Holboca" and others) are a distinctive feature of local SFSCs, managing retail outlets on the agri-food markets or in commercial areas (neighbourhood – central areas, supermarkets/hypermarkets – specially designated areas rented out for other market actors).

According to S.V.F.S.A. Iaşi, in 2017, there were 74 butchers and 27 meat products suppliers officially registered in the county. Among the slaughterhouses with the highest turnover we can mention "Kosarom SA", "Marcel S.R.L.", "Avastar S.R.L.", "Fermador", "Avi-Top SA", "Ferma nr. 1 Bivolari S.R.L.", "Star-Carn S.R.L." and "Doru'M Company S.R.L".

The best-known brands in the meat industry are working with the Horeca network, also benefitting from mutually beneficial partnerships involving the large retailers operating at regional/country-wide level (Profi, Kaufland, Selgros, Carrefour, Metro, Auchan). Hypermarket chains such as Kaufland, Selgros, Metro and Profi operate their own butchers/meat processing units. Moreover, it can be noted that besides the previously mentioned brands, there are several economic players on the local market of Iași city who are based in other surrounding counties, which have opened a series of producer-owned retail outlets, constantly providing a various range of distinct food products ("SC Aurora Com S.R.L." from Odobești - 2 stores, "SC Vanbet S.R.L." from Sălcioara - 6 stores, "SC Sagrod S.R.L." from Darabani - 5 stores, "Grupul de firme TCE 3 Brazi" - 3 stores, "SC Morandi-Com S.R.L." from Lipovăț - 3 stores, "SC Safir S.R.L." from Vaslui, "SC Killer S.R.L." from Horodnic de Jos" - 3 stores, "SC Raitar S.R.L." from Sasca Nouă - 1 stores, "SC Rogelya Prod S.R.L." from Fălticeni - 1 store, etc.). In 2017 more than 60 small meat producers sold their products through the Facebook Group named "Iasi wants local products".

Considering another important economic sector, i.e. the dairy industry, one can note that several producers in Iaşi county are consistently present on the local market: "Agricola 96 Țigănași", "SC Agrocomplex Lunca Pașcani", "SC Transgigel S.R.L.", "Astra Trifești Agricultură", "SC Agrocom Strunga SA" and also "Panifcom S.R.L.". According to the same Iași S.V.F.S.A. database, the following independent authorized milk processing centers operated in 2017: "SC Romlacta S.R.L.", "SC Transgigel S.R.L.", "SC Nicodan 2000 S.R.L.", "SC Faraon Grup Oil S.R.L.", "SC Agrocom Strunga SA" and "SC Roumeli Innovation S.R.L.". Several milk processing units decided to manage stores/vendor stalls in the large agri-food markets ("SC Agrocom Strunga SA", "SC Transgigel S.R.L." – 5 locations). Apart from the previously mentioned ones, the list can be expanded by taking into account 438 milk processing centers that are integrated into small-scale agricultural holdings, most of them capitalizing their production by resorting to various means specific to SFSCs (agri-food markets, recommendations, Facebook Buying Groups, various fairs, etc).

The local producer "Ferma Caprele Irinucăi Șorogari" manages to sell efficiently most of its well-known good quality farm products by means of social media, in particular the previously mentioned Facebook Group "Iași wants local products". Other renowned local small-scale producers are "Ferma de capre Alpina", "Ferma Caprele lui Camy", "Brânzeturi bune Iași", "Transgigel S.R.L.", "Mănăstirile Miclăușeni" and "Vlădiceni" and other 11 smaller suppliers. "Caprele Irinucăi" currently stands out as an example of good practice, which can be obviously replicated successfully. A peculiar feature of SFCSs in this economic sector is that the dairy suppliers in the neighbouring counties sell their products in producerowned retail outlets/partner stores (supermarket network included); examples are "Vanbet S.R.L." and "Ilvas SA" (Vaslui County), "Five Continents Group Răchiți", "Lacto Solomonescu S.R.L.", "Viofanny Lact Prodcom S.R.L." (Botoșani County), "Almera International S.R.L." (Bacău County), "Vranlact SA" (Vrancea County) and "TCE 3 Brazi" (Neamț County).

The milling and bakery industry can be considered as relatively developed in Iasi county, if one takes into account the currently available statistics that indicates 74 bakeries, 132 producers specialized in breadmaking, bakery and also confectionery products, 27 suppliers of milling products, 7 producers/suppliers of biscuits and bakery products, 100 confectionery/confectionery-bakery and one cereal manufacturing micro-factory, all registered at S.V.F.S.A. Iași in 2017, most of which operate on the local market (except for the big manufacturers). "Velpitar SA" Iași, "Panifcom S.R.L.", "Compan SA", "Afer S.R.L." and "Agrocomplex Lunca Paşcani S.R.L." are currently the big players on the market, providing consumers with a wide range of products. They operate their own retail outlets, which are mainly located in the densely populated areas and in the proximity of the agri-food markets in Iasi. "Panifcom S.R.L." - 15 stores and "Conpan SA" - 9 stores are the main suppliers of bakery products in the local public sector (hospitals, kindergartens, schools, canteens). Most of their production is marketed through neighborhood stores and large retail supermarket chains. The retail chains (Carrefour, Auchan, Selgros, Kaufland, Lidl, etc.) own their bakeries/pastry shops. In addition, there are many bakeries/confectioneries offering a limited range of products at competitive prices. While the milling units have a relatively uniform spread at county level, bakeries are unevenly spread, most of them being located in Iasi and in the metropolitan area. Confectioneries, pretzel makers and pie sellers are mainly located in urban centers or areas with intense traffic (major shopping centers, central neighbourhoods, agri-food markets, bus stations/ railway stations or other commercial areas). As regards the pretzel market, the "Petru" brand ("SC Man Group S.R.L." based in the City of Piatra-Neamt) stands out, given the fact that currently it runs 19 pretzel shops in Iași.

Despite the fact that there is no official recorded evidence on the operation of craft bakeries in Iaşi county, in recent years some artisan bakeries have opened in the city of Iaşi, offering consumers a range of high quality products, such as: "Coşul cu Pâini", "Pâine cu Maia", "Magazia Morăriței", "San Pan", "Pangran", "Produse de Acasă", just to mention a few. As of 2016, 8 small artisan bakeries and 36 craft confectionery/bakeries managed to sell their products efficiently thanks to the "*Iaşiul vrea produse locale*" ("Iaşi wants local products") Facebook Buyers' Group. It results that the most valued products were the craft bread, the "maia" dough bread, various types of sponge cakes as well as "homemade cakes".

In the yeast niche sector, "Rompak"– Paşcani ("SC Rompak S.R.L." – Pakmaya brand) stands out as the main economic player at national level. In addition, "SC Zeelandia S.R.L.", located in the rural commune Valea Lupului, is currently the leader, given its local market share of natural and synthetic additives for food products and beverages, with a turnover of over 46 million RON. "SC Coseli SA" and "SC Tinarom S.R.L.", based in Iaşi, are important producers of food essences and flavours on both local and regional market, with a cumulated turnover of about 16 million RON.

Pastry-confectionery products are particularly appreciated in Iaşi, given the fact that no fewer than 100 confectioneries/confectionery and pastry shops were operating in 2016. Currently the owners of large market shares are the "Frişcot" confectionery ("Panifcom Group of Companies" – 5 units), "Blanca" ("SC Sweet Blanca S.R.L. – 6 units), "Cake Expert" ("SC Cake Expert S.R.L." – 4 units), "Tuffli" ("SC Crunch S.R.L." – 3 units), "Moo Gelato" (9 locations), "Charlotte" ("SC Arthur & Eric" – 2 units), Other (2 units), "La Folie" ("SC Gourmanderie S.R.L. – 2 shops), "Inesa" ("SC Inesa S.R.L." – 2 units), "Kids Land" (2 units) and "Caprice ("SC Select Grup SA"). Special orders can be placed via telephone directly at the company's headquarters or on their privately-owned websites.

A very good market position is held by "SC Acrişoru S.R.L." registered in the City of Iaşi, which markets the traditional and highly appreciated "*borş*" (sour bran and water), locally as well as regionally. Another similar supplier is "Zorian" ("SC Co Prod Sor S.R.L."), a small factory with a packaging line of cold-pressed sunflower oil. Its products are distributed on the Iaşi market by means of SFSCs or specialized partner stores, Facebook Buying Groups or various gastronomic events (Platferma.ro, 2017).

As for aquaculture, according to data provided by the S.V.F.S.A. Iaşi, in 2017 there were 15 aquaculture farms with a relatively even geographic distribution throughout the county and 26 fisheries (out of which 18 were located in the city of Iaşi). Lakes, ponds and swamps and other similar bodies of water covered a total area of 13,106 ha of the county's territory, according to the statistics available for 2014 (National Institute of Statistics Romania, 2017).

In the city of Iaşi, fishery outlets are located mainly in the agri-food markets or their proximities ("Alexandru", "Nicolina", "Central Hall Market", "Eminescu", "Chirilă"), but one can also can benefit from access to them through the stores located in neighbourhood centers (the "Păcurari" district, "CUG" district, "Tătăraşi" district and "Alexandru" district). Most fishery outlets are owned by large-scale suppliers of fish and fish products, such as: "SC Piscicola S.R.L." – 5 fisheries, "SC Rompescaris S.R.L." – 2 fisheries, "SC Pescado Grup S.R.L." – 2 fisheries, "SC Şarpele S.R.L." – 2 fisheries and "SC Acvares S.R.L." – one fish farm. Several fish farms are located in rural communes such as Cotnari, Dancu, Răducăneni, Tomești, Țigănași, Sârca, and in towns such as Hârlău, Târgu-Frumos and Pașcani. Not surprisingly, the fish and fish products marketed in Iași are mostly of local origin. On the contrary, only a small quantity of fish and fish products sold in the major retail chains are of Romanian origin, as retailers such as Kaufland (2 retail outlets), Carrefour (2 retail outlets), Selgros, Auchan or Metro are importers of foreign brands from countries with tradition in the fishing sector such as Greece, Italy, Norway and Spain. Obviously, an overwhelming part of customers in Iaşi are, unfortunately, buyers of foreign fish products.

According to the "Iași wants local products" Facebook Group, only four intermediaries – "Păstrăvăria Bicaz-Plutărie", "Pescăria La Cherhana", "Pește Proaspăt" and "Andreea Șerban" managed to market their high quality fresh fish/preserved fish products, from vendors such as "Bicaz-Potoci" Troutery (Neamţ County), Danube (Tulcea County) or from the Danube Delta.

In the rural economy of Iaşi county, bee-keeping can be historically traced. The region comprising the villages of Poieni-Schitu Duca stands out as being one of the most renowned. According to data and information provided by the S.V.F.S.A. in 2017, there were eight registered bee product shops and 1,063 active apicultural holdings in Iaşi, many of them marketing their production through SFSCs (agri-food markets, Facebook Buying Groups, online shops, farm shops, roadside farm stands, or in market stands run by farmers at Farmers' markets or food fairs, etc.).

It should be noted that overall, few beekeepers manage to promote themselves effectively online: "SC Apicris Natura S.R.L.", "SC Prisaca Bârnova S.R.L.", "BZZ" ("PFA Cernescu Cristian", Deleni), "Taina Vie" ("II Iliescu Gh. Oana Maria", Bârnova") and "Miere din Poiana" ("I.I. Fenea D.", Iași). Of particular importance are the partnerships between "Miere din Poiana" and Prisaca Bârnova" brands and Emag.ro – which is currently the biggest online store in Romania. Beekeepers generally manage to get better and easier access to the local market by means of social media, especially due to the very active Facebook Group "Iași wants local products". Owing to this group, no fewer than 30 beekeepers have the possibility to sell their products locally. Multi-floral honey is the all-time customer favourite. It can be noted that small local producers fail to reach the shelves of large retail chains out of several reasons. In particular, small local beekeepers prefer to sell their products as much as possible on local markets (retail) or by means of the large national processors (wholesale).

S.V.F.S.A. Iaşi also provides information on the vegetable sector, which is quite well represented, with 25 fruit and vegetables storage facilities, 13 fruit and vegetable processing/preserving factories and last but not least, the numerous and widely spread network of proximity grocery stores. The "Champignon" and "Pleurotus" mushrooms are produced by seven companies, whose products are sold to proximity greengrocer shops and other stores in Iaşi, as well as to vendors on the agri-food markets.

As for the output and volume of the vegetable sector, by comparing available numerical data at county level, the main supplier is "Târgu-Frumos vegetable basin". The produce sourced in the region is bought by wholesalers and the rest by smaller retailers in agri-food markets, as few producers have access to market stands. As a matter of fact, this is a major problem faced by most producers, given that agri-food markets in the city of Iaşi are effectively dominated by intermediaries. This is the main reason compelling small producers to resort to other types of SFSCs.

In this context, it is worth mentioning the example of good practices provided by "Legumele de Aroneanu", a small producer operating in the village Aroneanu, who successfully managed to implement an EAFDR project worth approximately 2.5 million euro with the aim of building five vegetable greenhouses in the same village (7est.ro, 2014). Locally sourced produce is marketed in various partner grocery stores throughout Iaşi, as well as by means of different dedicated Facebook Buyers` Groups. The Aroneanu based producer has now signed a partnership agreement with the Carrefour hypermarket chain.

Examples of good practices can be further found in the rural commune Voinești. On-line vendors such as "Gustul Natural", "Verde Bun" and "Coșul Săptămânal" have recently started to significantly increase their supply to cover the demand of the county seat, Iași city. The distinguishing feature of these SFSCs is that they make use of on-line shops and even offer potential customers the possibility of home-delivery schemes – "the weekly vegetable basket". A large number of "Gustul Natural", "Verde Bun" and "Coșul Săptămânal" customers belong to the Facebook Group "Iași wants local products", which serves as a platform that joins the supplies from other 21 other producers.

As regards other types of crops, note should be made of the extended cherry orchards in the areas of Comarna and Cotnari. The locally sourced produce supplies customers in the city of Iaşi in the May–June season. "Cireşele de Comarna" ("The Comarna Cherries") and "Boambele de Cotnari" ("Large Cotnari Cherries") are very well-known varieties preferred by the local people, which are also appreciated at wider regional level.

For the fruit production at Iaşi county level, an important fruit storage facility is located in the village Sârca (Bălţaţi commune). With a total storage capacity of 5,000 tons/year, this important storage facility provides adequate conditions for fruit conditioning, mainly apples, also for the small fruit farmers in the area (Pomicolai.ro, 2012). Moreover, it can be noted that as of 2016, the Sârca based facility has also implemented a packaging line for fresh apple juice. Considering the overall scale and development of the fruit production and marketing, we should also mention several other economic operators, such as: "Vinifruct Copou", "Vitalef SA", "SC Cerasus Grup Cotnari S.R.L.", "Domeniile Lungu", "SC Hortifruct S.R.L." and "Legume Fructe SA Răducăneni". Most of the local output is marketed in agri-food markets, various groceries and other proximity shops throughout the city of Iaşi.

Another relevant segment of producers owning a significant share of the market is represented by the preserved fruit suppliers. The relatively high local

demand is an indication that such fruit preserves are very-well appreciated, mainly because they use traditional recipes. Examples are "Hillita Pomivitico" (fruit stews, jam and jelly), the natural fruit juices produced by "Domeniile Lungu" (the "Fructalis" brand from Bivolari), "SC Hortifruct S.R.L. (the Ciortești workshop) and the apple juice brand "Das Gruene Haus S.R.L." (Ciurea workshop), "Deliciile de Prisăcani", "Vitalef" and "Frateli Pala" stewed fruits, which are highly appreciated on the market of the city of Iaşi, considering their demand. The company "Vitalef S.R.L." has managed to become a constant supplier to various hospitals/canteens in the city of Iasi, thus encouraging the development of SFSCs in the public sector as well. "Iași wants local products" Facebook Buyers` Group includes over 20 producers of jam, jelly, syrup, whole fruit jam/conserve and fresh juices prepared according to traditional recipes, with effective suppliers of the local market (e.g. "Zmeurișul Coasta Neagului", "Cămara cu di tăti", "Gustul Natural", "Bunutz de casă Aurica", "Coșul Săptămânal", "Grădina din poveste", "Rodul Grădinii", "Căpșuni de Aroneanu", amongst others). As regards the customers` preferences, all time favourites are the "rose petal marmalade" and the "bitter cherries", as well as the high-quality apples and fresh apple juice from the "Fălticeni" fruit-growing area and environs. The locally sourced produce is regularly marketed thanks to the overall network of retail chains, as well as by means of agri-food markets, grocers, proximity shops or producer-owned online shops/partners.

Recently, a developing niche market is represented by berries. Out of total 34 local producers who regularly sell their fruit by means of "Iași wants local products" Facebook Buyers` Group, at least eight are providers of fruits and fresh or preserved strawberries. The local brand "Căpșuni de Aroneanu" is widely considered a good example of efficient marketing strategies.

According to S.V.F.S.A Iași branch, in the year 2017, the viticultural sector comprised 16 wineries and 2 alcohol/ethyl alcohol processing plants of agricultural origin. In the wine-making industry, the vineyards located in Cotnari and Iasi are famous at national level, with a century-old tradition in the region of Moldavia (Revino.ro, 2017). Overall, it is to be noted that the area under vineyards and vine nurseries in Iasi county increased to 11,679 hectares by the year 2014 (National Institute of Statistics Romania, 2017). The wineries "Cotnari SA" (1,700 cultivated hectares) and "Bucium SA" (1,050 cultivated hectares) are two noteworthy producers that are also the main local economic actors in the branch, suppliers at local and national level. "Cotnari SA" and "Bucium SA" manage well their business, firstly, thanks to their economic partnerships with most key supermarket/hypermarkets chains and with the members of the HoReCa network. Secondly, both producers also supply various small proximity stores and specialized shops. Thirdly, "Cotnari SA and "Bucium SA" benefit from a network of producer-owned retail outlets and vendor stalls across the county of Iasi and in the neighboring counties – regional coverage. Moreover, both brands also currently manage privately-owned online stores which promote the concept of wine tastings to potential customers at "Cotnari Castle", or "Bucium Wine Cellar", provided that groups of minimum ten people express their wish in advance. Products like "*Grasă de Cotnari*", "*Frâncuşa de Cotnari*", *or "Busuioaca de Bohotin*", for instance, are highly appreciated local brands, winners of numerous national and international medals over time.

Since 2007, several new wineries have appeared on the local market, including Domeniile Lungu-Crama Hermeziu-138 hectares ("SC Jurex LV S.R.L.", "SC Agro Industrial Ceres S.R.L. Bivolari"), managing 2 privately-owned retail outlets in the city of Iași, "Domeniul Viticol Țibu - 77 hectares ("SC MDT Agricol S.R.L. Tomesti" - 5 privately-owned retail outlets in the city of Iasi), "Gramma Winery-34 hectares ("SC Olteanu S.R.L. Bârnova), "Vlădoianu and Axinte Crafts" - 350 hectares ("Casa de Vinuri Cotnari", Cârjoaia) and "Crama Weingut" ("SC Weingut T & D S.R.L." from Iași). Small producers such as "Hermeziu", "Tibu", "Vlădoianu" and Gramma" have successfully signed partnerships with members of the HoReCa network, retail outlets specialized in wine selling across Romania, specialized online shops (e.g. Revino.ro, Vinclass.ro, Rewine.ro, Vinexpert.ro, Lovewine.ro etc.) and privately-owned online stores. Thanks to the Facebook Buyers' Group "Iaşi wants local products", 26 artisanal wine producers from the vineyards of "Cotnari", "Iași" and "Huși" had the unique opportunity to market locally in 2016. Traditional recipe drinks (e.g. fruit brandy, plum brandy and cherry, cranberry, apricot and raspberry beverages) are highly appreciated, given that 12 small-scale producers use the same on-line group.

Historical documents and other data provide evidence that Iaşi has always been an important actor on the regional beer production market, as early as the 18th century, when the "Zimbru" Brewery-Iaşi was established. However, after having reached its maximum output potential in 1990, the industry started a slow process of overall decline to such an extent that currently only one craft beer manufacturer – "Capra Noastra" ("SC Capra Noastră S.R.L." Iaşi) is covering the local demand of Iaşi. The small producer's bottling line is a result of a project and investment worth 0.5 million euro. The craft beer maker currently has a production capacity of up to 6,000 liters/month. The distribution is mainly local but some of its products reach the national market by means of the HoReCa network and specialized online stores.

As for the agri-food markets, there are 7 permanent ones in Iaşi, mainly supplied with locally sourced produce ("Alexandru cel Bun", "Hala Centrală", "Tătăraşi", "Nicolina", "CUG", "Independenței" and Chirilă") and two temporary food markets ("Păcurari" and "Prefectura Iaşi"). The main problems faced by domestic/local producers are the very difficult access to stalls and the absence of tax incentives, which favours the intermediaries. Several agri-food markets are located in the town Paşcani (2 markets), while citizens from the smaller towns Târgu-Frumos, Podu Iloaiei and Hârlău have access to one market in each locality. Iaşi County Council, the Agriculture Department of Iaşi County, Iaşi City Hall, as well as other public/private entities are permanently involved in organizing numerous fairs and events with the aim of actively promoting local agri-food producers. Thus, several communes in Iaşi county organize weekly agri-food markets, fairs/tourism events specific to rural areas.

#### **5. CONCLUSIONS**

Romania's accession to the European Union also implied the adherence to the common principles of the single market and four fundamental freedoms. The subsequent entry of large retail chains on the regional and local markets, in Iași county included, has ultimately had an overall strong impact on the local producers.

Moreover, many local businesses in the agri-food sector have, unfortunately, gone literally bankrupt. Thus, most entrepreneurs who managed to survive economically were faced with the only solution left – accepting the idea of the constant need for change and compliance with the new requirements of the single/globalized market.

However, it can be noted that in recent years a modest but certain rebound has taken place in the local agro-food industry, given the fact that major local producers ("SC Kosarom SA", "SC Cotnari SA", "SC Avi-Top SA", "SC Fermador S.R.L. ", "SC Panifcom SA" among others) have managed, despite all odds, to create their own complex distribution networks, to enter into partnerships with HoReCa network, with the large retail chains inclusively (Kaufland, Selgros, Carrefour, Metro, Auchan, Profi, etc.).

The literature on this topic and other relevant information points out that there is a clear tendency of Romanian consumers to reconsider their purchasing options in favour of quality agri-food products. This turn can be accounted for by considering several aspects such as developing consumer awareness, especially regarding the importance of food quality, as well as the increase of disposable household/per capita income.

On the other hand, it must be admitted that even hypermarkets/supermarkets are compelled to permanently adapt to Romanian market shifts and to the subsequent need to reconcile and reconnect consumers and local producers. An indication of this development is the ever-growing share of Romanian products on the shelves of large retailers. Moreover, one can also take into account that certain large retailers have rented commercial spaces to local producers (for example, the presence of Killer stores in the Carrefour Iaşi network or SC Transgigel S.R.L. in Selgros and others).

By reviewing briefly but exhaustively the overall situation of the agri-food sector in Iaşi county, it becomes obvious that this is strongly influenced by the county's geographical features, which can ultimately provide SFSCs with a great potential for future development.

According to statistical data available for 2017 provided by Iaşi Sanitary Veterinary and Food Safety Agency, out of total 3,471 officially registered economic operators such as processing units/sellers, 3,044 were local processing units delivering food products of animal origin, whilst 427 units were specialized in processing/selling products of non-animal origin. It can be noted that most of these active units in the food retail sector were using selling methods and practices specific to SFSCs. It can be concluded that their future existence depends to a large extent on the entrepreneurs` ability to adapt to the current volatile market conditions, but also on the solidarity of the local community with the local producers.

As regards SFSCs marketing, local producers in Iași county resort to several methods: on farm sales (farm shops; roadside sales;), farmers' markets and other types of markets, off farm sales/stands near various tourist attractions (monasteries, historical centers, malls etc.), food festivals/ tourism events; other cultural and gastronomy related events, privately-owned retail outlets – meat suppliers, butcher's, bakeries, pretzel shops, groceries, deli shops, milk vending machines (often located in agro-food markets), exhibition stands and mobile food carts (usually in large urban centers and other tourist attractions), social networks (Facebook Buyers' Group "Iași wants local products"), producer-owned retail online shops/specialized partner stores.

Further development of SFSCs in Iași county can be achieved by the following measures and recommendations:

- supporting and promoting the concept of agri-food producers' association, with the aim of increasing cooperation locally;

- encouraging local consumers to support domestic producers will also result in a deeper solidarity between individuals;

- increasing the young consumers' access to information in order to better educate them with regard to the direct and indirect benefits of consumption of locally sourced products;

- strengthening the support of farmers` (permanent and temporary) markets and fairs;

- stimulating the growth of SFSCs by means of innovative forms of marketing such as produce delivery schemes –weekly basis, Facebook Buyers` Groups, Community Supported Agriculture (CSA) schemes, Farm Direct Deliveries (Internet sales, Specialty retailers), specialized vending machines, designated temporary markets, food public procurement schemes which sourced food within a defined geographical area, as well as new methods of promoting local traditional cuisine (gastronomic routes, food markets, food festivals) and other tourism events;

- facilitating the local consumers' access to locally sourced produce by better promoting the market visibility of local agricultural holdings/suppliers (temporary markets, tasting events, cooking competitions, fairs and gastronomic events);

- increasing customer awareness of product features through product packaging and marketing techniques (branding), and the use of certifications and

regulations to protect trademarked products with distinct geographical origin – P.D.O. (Protection of Designated Origin) or P.G.I. (Protected Geographical Indication), Bio Certification;

- improving the credibility attributable to agri-food sector products provided by rural vendors by encouraging and even financially supporting them to adopt labelling and quality-warranty schemes such as P.D.O, P.G.I. as well as T.S.G.;

- resorting to strategic actions and perspectives when addressing rural communities with increased potential for development in tourism related activities;

- stimulating the growth of EU funding accessed by individuals and enterprises based on the legal basis provided under the 2014–2020 National Rural Development Program framework, especially the sub-measures aimed at encouraging the establishment and support of existing SFSCs, by providing incentives to boost association and cooperation between groups of farmers and also for the development of rural tourism; the issues are addressed by NRDP under Submeasure 16.4 – "Support for horizontal and vertical cooperation among actors in the supply chain for the establishment and development of short supply chains and local markets, and for related promotion activities in a local context" and Submeasure 9.1a – "Establishment of producer groups in the fruit-growing sector" (Ministry of Agriculture and Rural Development, 2015);

- creating a better effective legislative framework to facilitate local producers' access to the retail and cash & carry market (one should see the conflicting articles of Law no. 150/2016, passed with the aim of amending Law no. 321/2009 on the marketing of food products).

#### REFERENCES

- 1. 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, Joint Research Center, Luxembourg.
- 2. Marsden, T. et al., (2000), Food Supply Chain Approaches: Exploring their Role in Rural Development, in: Sociologia Ruralis, 40 (4), 424–438.
- 3. Renting, H. et al., (2003), Understanding Alternative Food Networks: Exploring the Role of Short Food Supply Chains, in: Rural Development. Environment and Planning A 35, 393–411.
- Tanasă, L., Dinu Vasiliu, C., Brumă I.S., Doboş, S., (2016), Short Food Supply Chains as a Meachanism for Sustainable Development. Case Study – Târgu-Neamţ Touristic Area, in: Agrarian Economy and Rural Development – Realities and Perspectives for Romania, 7th Edition of the International Symposium, 316–324.
- Tanasă, L., (2015), Lanţuri logistice agroalimentare scurte sustenabile pentru dezvoltarea inovativă a turismului şi a comunităților rurale din țările emergente, in: Crizele şi piețele emergente, Haller, A.P. & Dămăceanu, R.C. (Ed.), Pro Universitaria, Bucureşti, 191–218.
- 6. Tanasă, L., (2014), Benefits of Short Food Supply Chains for the Development of Rural Tourism in Romania as Emergent Country During Crisis, in: Agricultural Economics and Rural Development, Year XI (2/2014), Editura Academiei Române București, 181–193.
- \*\*\* Embassy of the Netherlands in Romania, (2016), *Food Sector in Romania 2016*, FRD Center publication for the Embassy of the Kingdom of the Netherlands in Romania, Bucureşti, https://www.dutchromaniannetwork.nl/wp-content/uploads/2017/01/Food-Report-Romania-2016.pdf [accessed: December 2017].

- \*\*\* Iași Sanitary Veterinary and Food Safety Authority Iași S.V.F.S.A., (2017), www.ansvsa.ro [accessed: December 2017].
- \*\*\* European Network for Rural Development, (2013), *Defining local food systems and short supply chains*. In *EU Rural Review*, No 12, p. 5, https://enrd.ec.europa.eu/sites/enrd/files/fms/pdf/89E54472-A7ED-41AD-84A6C392AD7EC E14.pdf, [accessed: November 2017]
- 10. \*\*\* National Institute of Statistics Romania, Tempo Online NSI Romania, (2017), http://statistici.insse.ro/shop/, [accessed: December 2017].
- 11. \*\*\* Ministry of Agriculture and Rural Development MARD, (2015), National Rural Development Program for the Period 2014–2020 (approved version), Bucharest.
- \*\*\* The European Innovation Partnership EIP-AGRI, (2015), EIP-AGRI Focus Group Innovative Short Food Supply Chain management (Final Report), Brussels, https://ec.europa.eu/ eip/agriculture/sites/agri-eip/files/eip-agri\_fg\_innovative\_ food\_supply\_chain \_management\_final\_ report\_2015\_en.pdf [accessed: December 2017].
- \*\*\*https://www.7est.ro/exclusiv-7est/reportaje/item/10046-miracol-in-miezul-iernii-gasiti-inalimentarele-iesene-rosii-de-aroneanu-ieseanul-care-sparge-monopolul-importurilor. html [accessed: December 2017].
- 14. \*\*\* http://www.analizeeconomice.ro/2017/06/jidvei-conduce-in-topul-producatorilor .html [accessed: December 2017].
- 15. \*\*\* https://www.cotnari.ro/magazin-online/ [accessed: December 2017].
- 16. \*\*\* https://www.facebook.com/groups/IasulVreaProduseLocale/ [accessed: December 2017].
- 17. \*\*\* https://platferma.ro/zorian-ulei-floarea-soarelui-presat-la-rece-judetul-iasi/ [accessed: December 2017].
- 18. \*\*\* http://www.pomicolaiasi.ro/Fructe-3p.html [accessed: December 2017]
- \*\*\* http://www.revino.ro/upload/files/harti/Harta\_viticola\_Romania\_-\_Crame\_2017. png [accessed: December 2017].