

FOOD HUBS IN ROMANIA ASSESSMENT OF A PILOT PROJECT

Kinga Xenia HAVADI-NAGY, Cluj-Napoca (Romania)*

*Initial submission / erste Einreichung: 11/2020; revised submission / revidierte Fassung: 12/2021;
final acceptance / endgültige Annahme: 12/2021*

with 1 figure and 2 tables in the text

CONTENTS

<i>Summary</i>	327
<i>Zusammenfassung</i>	328
1 Introduction	328
2 Research methodology	330
3 Romania's farming-sector. Brief overview	332
4 Findings and discussions	334
4.1 The food hub pilot project. General presentation	334
4.2 Functions and operations of the surveyed food hubs	338
4.3 Chances and challenges	341
5 Conclusions	344
6 References	345

Summary

The “Civitas Foundation” is an NGO experienced in rural development. With the financial support of the “Romanian-American Foundation” in 2017 it initiated a pilot project to test the efficiency of the “food hub” short food supply chain in Romania. The goal of this endeavour is to improve the competitiveness and the development prospects of small and medium-sized farmers, and the revitalisation of the rural areas in general. We aim to analyse the undertaking according to the following objectives: (1) Assess the functions and services provided by the food hubs; (2) Draft a profile of the networks' producers; (3) Investigate the factors which could endorse or hinder the development of the food hub networks in Romania.

To achieve our goal, we carried out a qualitative research based on secondary data analysis, interviews with significant stakeholders, and participant observation. We can

* Kinga Xenia HAVADI-NAGY, PhD, Lecturer, Faculty of Geography, Babeş-Bolyai University, Cluj Napoca / Kolozsvár / Klausenburg, Clinicilor 5–7, RO-400006, Romania. – Email: kinga.havadi@ubbcluj.ro.

conclude that this model of short food supply chain merges a variety of producers, diverse in size and economic performance, product type and category. The food hubs are not just aggregators of local agri-food products or logistical warehouses, but they provide several vital services for small and medium-sized farmers. Under certain circumstances (e.g., financial and policy support), this approach, which couples economic targets with sustainability issues, has chances to be successfully scaled up on a national level.

Keywords: Food hubs, rural development, smallholders, short food supply chains, Romania

Zusammenfassung

NAHRUNGSMITTELNETZWERKE („FOOD HUBS“) IN RUMÄNIEN. BEWERTUNG EINES PILOTPROJEKTS

Die „Civitas Stiftung“ ist eine in der ländlichen Entwicklung erfahrene NGO. 2017 initiierte sie – mit finanzieller Unterstützung der „Romanian-American Foundation“ – ein Pilotprojekt, um die Effizienz von Nahrungsmittelnetzwerken („Food hubs“) in Rumänien zu analysieren. Ziel der „Food hubs“ ist es, die Wettbewerbsfähigkeit und die Entwicklungsperspektiven der Klein- und Mittelbetriebe zu verbessern, sowie die Revitalisierung des ländlichen Raums allgemein zu unterstützen. Im vorliegenden Beitrag wird dieses Vorhaben untersucht, wobei folgende Aspekte einer näheren Analyse unterzogen werden: (1) Funktionen und Dienstleistungen, welche die „Food hubs“ bieten; (2) das Profil der mitwirkenden Produzenten; (3) Faktoren, die die Entwicklung dieser Art alternativer Nahrungsmittelnetzwerke in Rumänien unterstützen oder behindern könnten.

In diesem Zusammenhang wurde eine qualitative Forschung durchgeführt, die auf Sekundärdatenanalysen, Interviews mit bedeutenden Akteuren und teilnehmender Beobachtung basiert. Die Analyse hat ergeben, dass dieses Modell der kurzen Nahrungsmittelversorgungsketten eine Vielzahl von Landwirten und Lebensmittelherstellern zusammenführt, die sich in Größe und wirtschaftlicher Leistung, Produkttyp und Kategorie unterscheiden. Die „Food hubs“ sind nicht nur Aggregatoren von lokalen Agrar- und Lebensmittelprodukten oder logistische Lagerhäuser, sondern bieten eine Reihe lebenswichtiger Dienstleistungen für kleine und mittlere landwirtschaftliche Betriebe. Unter bestimmten Umständen (z. B. finanzielle und politische Unterstützung) hat dieser Ansatz Chancen für einen nationalen Durchbruch.

Schlagwörter: „Food hubs“, Nahrungsmittelnetzwerke, ländlicher Raum, Entwicklung der Landwirtschaft, Kleinbetriebe, kurze Vertriebsketten, Rumänien

1 Introduction

Alternative food networks (AFN) are subject to increasing interest as they are considered to be a concept contributing to enhance sustainability within the agri-food system and offer a lot of ways to strengthen endogenous rural development (RENTING et al. 2003;

SEYFANG 2009; SANTINI and GOMEZ Y PALOMA 2013; OPITZ et al. 2017). New ways of food production, distribution and consumption are applied to minimise the negative impact on environment and society, which could forge ahead sustainability within the food market chain (Agrathaer and ZALF 2017; OPITZ et al. 2017). The AFNs help to re-embed consumers, re-localise food systems, and renew the relationship between producers and consumers, reconnect them by means of their own activity and initiative (BÎRHALĂ and MÖLLERS 2014; WELLNER 2018).

The AFNs comply with the aims of the “Farm to Fork” policy of the European Union (EU) and can contribute to a “*fair, healthy and environmentally-friendly food system*” (EC 2020) by building “Short food supply chains” (SFSCs) that work both for producers and consumers and are environmentally friendly. They help achieve the EU’s goals “*to reduce the environmental and climate footprint of the EU food system and strengthen its resilience, ensure food security in the face of climate change and biodiversity loss*” (EC 2020, p. 7), while improving the incomes of primary producers and reinforcing EU’s competitiveness (EC 2020). SFSCs could be a chance to support small farms, who not only have an important role in the wider rural economy, but use non-invasive methods, which preserve biodiversity (EP 2013).

Romania assumed the goals of the “Farm to Fork” Strategy, whereat the development and dissemination of short food supply chains (SFSCs) might facilitate fair economic returns for the primary producers in the Romanian agriculture system featuring many small farms. The establishment of SFSCs was supported for the first time by European funds in the Romanian “National Rural Development Plan 2014–2020”. The figures indicate that few farmers acceded to these networks: 71 projects, which involved only 186 farmers, got financed under Measure 16.4, dedicated to support SFSCs (POPA et al. 2021). However private persons, activists in favour of small farm agriculture and NGOs involved in rural development started, independently from the public policy measures, several types of collaborative initiatives, mainly formalised SFSCs: community supported agriculture, direct selling box schemes, retail shops specialised in local products, cooperation under a local trademark with own retail shops, or even REKO type short food supply chains. This indicates that awareness is increasing both among policymakers (MADR 2021) and NGOs supporting small-scale producers that cooperation and professional assistance is relevant in order to improve the competitiveness and efficiency of smallholders (MÖLLERS et al. 2018).

Although most of the short food supply chains (SFSCs) in Romania are at an incipient stage, they raised some interest among the researchers. BÎRHALĂ and MÖLLERS (2014) consider ASAT (*Asociația pentru Susținerea Agriculturii Țărănești/Association for the Support of Peasant Agriculture*) as an example of the solidarity economy to support semi-subsistence farms. Based on insights from two SFSCs, SMEDS (2015) addresses the strong connections between the network’s stakeholders. In her survey, HAVADI-NAGY (2021) assesses the features of the REKO type sustainable marketing network operating in Cluj-Napoca. Other surveys link SFSCs to connected economic or social activities. For instance, TANASĂ (2014) deliberates upon the way that SFSCs can benefit the development of rural tourism, or HAȘDEU (2014), who acknowledges alternative food networks as instruments to preserve local and regional heritage. TANASĂ and peers (2015) analyse the

successful support of small farmers in the county of Harghita and credit it to the ambitions to strengthen and maintain local identity.

The short food supply chains (SFSCs) are an under-researched field with regard to the development and market accession opportunities of small farms and smallholder food processors in Romania. This contribution is a first attempt to address the feasibility of the food hub model in the Romanian context and contributes to the literature in the form of a detailed assessment of the pilot project integrating five food hubs initiated in 2017 and coordinated by NGOs engaged in community and rural economic development.

2 Research methodology

2.1 Concepts and definitions

In their study from 2016, BERTI and MULLIGAN made a comprehensive analysis of the food hub (FH) definitions and classifications mentioned in literature, as the concept is not explicitly defined and it is used in diverse ways by various stakeholders, like academicians, practitioners and policy makers, according to their individual priorities and objectives. In this analysis, we focus on two approaches of the food hubs summed up by BERTI and MULLIGAN (2016) under the following main aspects: (1) as “values based agri-food supply chains” and (2) as “sustainable food community development”.

The approach as “values-based agri-food supply chain” defines food hubs mainly as:

“a business or organization that actively manages the aggregation, distribution, and marketing of source-identified food products primarily from local and regional producers to strengthen their ability to satisfy wholesale, retail, and institutional demand.” (REYNOLDS-ALLIE et al. 2013, cited in BERTI and MULLIGAN 2016, p. 8)

The concept of “sustainable food community development” regards food hubs as:

“coordinating alternative sourcing, supply, and/or marketing on behalf of producers and consumers, and providing technical as well as infrastructure support for product distribution. In addition to having clear environmental goals, they are also often founded on social motivations relating to community cohesion, social gain, increasing healthy eating options, and improving local food access options. At the same time, they seek to provide an alternative source of economic income for local farmers.” (FRANKLIN and MORGAN 2014, cited in BERTI and MULLIGAN 2016, p. 8).

The food hub intermediary organisations analysed in this paper can be considered as a combination of the two main approaches. The food hubs initiated by the NGOs have a strong social aspect of supporting rural development and small and medium-sized farms and food processors, and of raising the awareness about the social, environmental and economic benefits of this kind of supply chains. Yet, on the other hand, the intermediary

organisations aim also to be self-sufficient, to create profit which should cover the costs of the venture and to be further invested in social projects conducted by the fostering NGOs.

2.2 Research methods and materials

In 2017 the *Civitas Foundation*, a NGO with the financial support of the *Romanian-American Foundation* (RAF) initiated a pilot project to test the efficiency of the economic model of the food hub in the effort to support the competitiveness and development prospects of small and medium-sized farmers, and the revitalisation of rural Romania in general (POPA et al. 2021).

We aim to analyse the undertaking of the NGO and to deliberate on the chances and challenges the project, comprising five food hubs in different regions, faced during its first years of existence. The objectives of the study are following:

- (1) To assess the functions and services provided by the pilot food hubs.
- (2) To draft a profile of the networks producers.
- (3) To investigate the contextual elements which could endorse or hinder the development of food hub type alternative food networks in Romania.

In our study, we address the perspective of the project initiators and coordinating NGOs. To achieve our goal, we carried out qualitative research based on secondary data analysis, interviews with significant stakeholders, and participant observation.

At first, we assessed the secondary data represented by the online activity of the five food hubs (websites, social media) and their coordinating NGOs, as well as relevant media texts (blog posts, newspaper and journal articles). The web platforms of the food hubs provided detailed information regarding (1) their functions and operations, (2) producers and products, (3) the network, as well as about (4) their aim, the rules and principles according to which they operate. Further information acquired from the individual online presence of food hub producers and processors completed the data about the producers involved in these short food supply chains (SFSCs).

Useful information about the initiative in general and for three of the five food hubs we gathered from a series of comprehensive interviews. These conversations focused on rural development were published in the journal *DOR (Decât o Revistă)* in 2019 and 2020, and they tackled the chances and challenges of this type of endeavours in the Romanian context. The articles written in Romanian are freely accessible both online and in printed version. We analysed six of these elaborate reports, which include the opinions of food hub coordinators, NGO representatives, selected producers and some consumers, granting insight into the complexity of the initiatives.

Following the content analysis of the information provided by the online and media presence of the initiatives, we designed a guide and conducted a semi-structured interview with (1) the project director of the *Civitas Foundation* in charge of the pilot project, (2) the operational manager of the *Nod Verde* food hub based in Cluj-Napoca, and (3) the project manager of the *Nod Verde* food hub on behalf of *Civitas Foundation*. The inter-

view-guide focused on the following topics: (1) the background of the interviewee; (2) the way the networks operate; (3) functions and operations of the food hubs; (4) producers and products; (5) stamina of the food hubs to assert in the Romanian context; (6) and finally, lessons learnt as well as future projects. The interviews were conducted in December 2021 via Zoom platform, lasted about 90 minutes each, and were recorded with the consent of the interviewees. The in-depth account of the interviewees provided insight into the pilot project in general and delivered details regarding one of the five food hubs.

The activity report “Food hub – alternative model for the development of small and medium-sized farms in Romania” (POPA et al. 2021), comprising the results of over four years, provided also valid quantitative data regarding the achievements of the venture.

The author was an occasional consumer of the food hub based in Cluj-Napoca, with the possibility to observe the services and products offered by the food hub, as well as to reflect about the consumer experience.

The framework of our assessment of the functions and operations of food hub intermediary organisations is the scheme of classification defined by BERTI and MULLIGAN (2016) along six directions including: (1) Logistics, (2) Marketing, (3) Product services, (4) Consultancy services for producers, (5) Web of practices, and (6) Community engagement.

3 Romania’s farming-sector. Brief overview

41.4 percent of the Romanian population live in the rural area, which comprises 85.2 percent of the total territory (EC 2021). In 2020, 18.5 percent of the active population were employed in agriculture (over four times higher than the EU average) and was working on 13,306,000 ha utilised agricultural area (UAA) (EC 2021).

Following the European trend, the number of farms is declining also in Romania. Nonetheless, 2016 the Statistical Office of the European Union (Eurostat) registered 3,422,030 farms, the highest number in the EU. The agricultural sector is characterised by a dual structure, both regarding farm size and economic performance, measured in standard output (SO). Numerous very small (SO less than 8,000 Euros per year), small (SO between 8,000–40,000 Euros) and medium-sized farms (SO between 40,000–200,000 Euros) share about the half of the utilised agricultural area, and few large-scale commercial agri-businesses work the other half of the UAA. Small farms operating under 5 hectares represent 91.8 percent of total farms, but only 28.5 percent of the agricultural area, while a small number of large farms, with over 100 ha, operate most of the UAA (48 %) (MADR 2021a). The average size of the agricultural holdings in 2016 was 3.65 ha utilised agricultural area, four times smaller than the average size in the EU (16.6 ha UAA) (MADR 2021a).

About 86 percent of the farms practice subsistence or semi-subsistence farming (SSF) (Eurostat Agriculture 2021), meaning that they sell less than 50 percent of the agricultural output (EU 2019). A great share of the farms has a weak economic performance, 94.5 percent of the farms registering in 2016 a standard output under 8,000 Euros (MADR 2021a). The high degree of land fragmentation is a result of the inefficient structural reorganisation of land ownership in the 1990s, and the consolidation process of the last decades. 99.2

percent of the farms have no legal form (MADR 2021a) and most of the farms are not eligible for agricultural payment schemes, hence only about 1 million farms are considered commercial and can benefit of area-based payments (POPA et al. 2021).

The overall predominance of very small farms and small and medium-sized farms that are basically family-run holdings explains also why farming is a mainly family activity. In 2016, the existing workforce was equivalent to over 1,6 million Annual Units of Work (AWU) (EC 2021), whereas only 4.5 percent of the labour force measured in AWU was not family labour (MADR 2021a).

The age structure in Romanian agriculture reveals that farm management is dominated by the elderly. Data for 2016 show that 44 percent of the farms were operated by farm holders older than 65, while only 14.7 percent of the managers of agricultural holdings were under 44 years old (Eurostat Agriculture 2021). More than 96 percent of farms are managed by people without any formal agricultural training, but with practical experience (MADR 2021a).

As we can see, despite its considerable potential, Romania's agriculture shows several deficits and confronts numerous challenges, whereas underused land potential and the high number of small farms is considered by the official discourse as mainly responsible for the prevailing rural poverty and a deficient commercialisation (MADR 2021). However, according to the survey of FREDRIKSSON and peers (2017), the area size and the dispersion of the cultivated land have little effect on the degree of market engagement of the Romanian households. In any case, small farms face multiple and various constraints in accessing the market: distance to sale points, inadequate transport infrastructure (FREDRIKSSON et al. 2017), high transaction costs, their inability to meet certain standards, insufficient storage spaces and processing units for fruits and vegetables, deficient connections between farmers, processors and traders of agri-food products (MADR 2021), lack of capital and adequate access to financial services to undertake necessary investments (FREDRIKSSON et al. 2017; MÖLLERS et al. 2018) and shortage of marketing channels, impeding them to open up for or intensify the commercialisation.

Although to some extent collaboration could mitigate the impediments small farms struggle with, cooperation and professional farm consultancy services are still at an incipient stage in Romania and the market share of the agricultural cooperatives is one of the lowest in Europe (MADR 2021). However, there are multiple other ways of mutual help: individuals may work together in informal groups within families, neighbourhoods or with friends, or in formalised producer groups, associations, or agricultural service cooperatives (MÖLLERS et al. 2018). Different actors can be initiators of a mutual self-help organisation or service cooperatives. Experience from European cooperative organisations show that leadership is of major importance especially for newly established groups (MÖLLERS et al. 2018).

Romanian and international examples prove that selfless promoters (e.g., NGOs, activists, private persons) can be vital in forming and guiding service cooperatives during their first years, withdrawing once the groups can manage on their own. Then again trends on broader political and institutional dimensions can facilitate or hinder the development of alternative food networks (SMEDS 2015). In its 2014–2020 “National Rural Development Plan” (MADR 2021), Romania included several development measures and financial in-

centives for small farmers (Sub-measure 4.1), associative forms (Sub-measure 9.1) and the short food supply sector (Sub-measure 16.4), which address family-owned agricultural holdings, small and medium-sized farms, and focus on creating new short food supply chains (SFSCs) and other associative forms.

4 Findings and discussions

4.1 The food hub pilot project. General presentation

The *Civitas Foundation* and its partners consider the *food hub* a possible answer to the structural deficiencies of the Romanian agriculture and aim to improve the market access of the small and medium sized farms and food producers, and to link them to the consumers in a short supply chain.

Following the proposition of the *Civitas Foundation*, the *Romanian-American Foundation* (RAF) supported in the first phase of the project ten NGOs with long-time experience in rural development and encouraged them to elaborate a concept of a food hub intermediary organisation. These NGOs received support to carry out a market survey and to outline a business plan. At the end of the six months, a committee of experts selected five of the ten initial projects (see Figure 1). In the second phase (30 months),

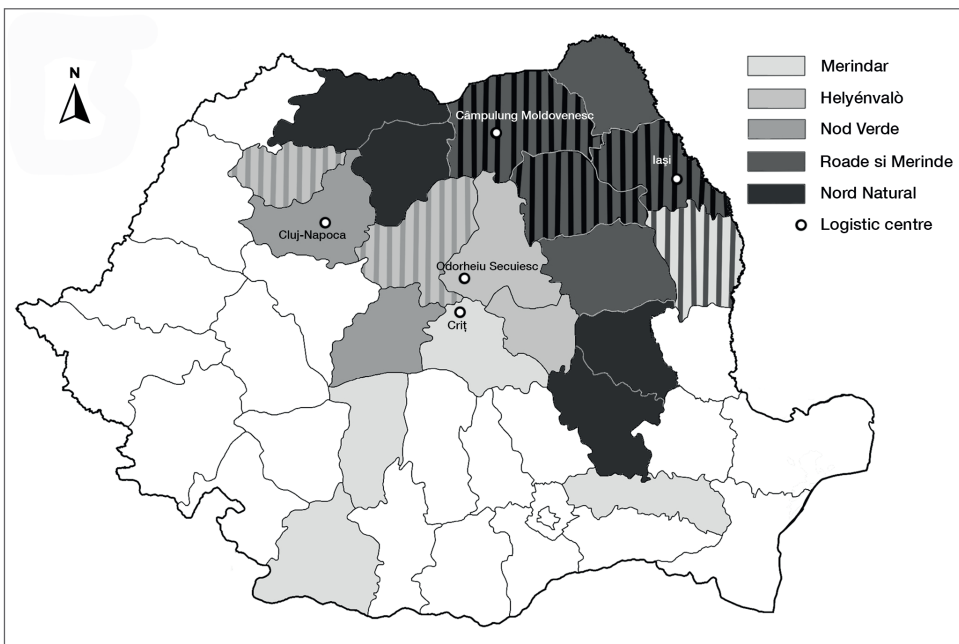


Figure 1: The five food hubs of the pilot project and their producer catchment areas (Graphic: Own design)

the selected NGOs received support for the implementation of their food hubs. Being the trigger force of the endeavour, the *Civitas Foundation* acted also as coordinator of the pilot project. The first phase started in January 2017 and the second phase officially ended in December 2019. RAF extended the financial support, and four out of the five food hubs are currently participating at a second stage (2020–2022) of the programme (POPA et al. 2021).

The initiators adopt a broad definition of the food hubs and regard them as

“organizations that actively manage the aggregation, distribution and marketing of food from products local and regional producers and in addition offer them a full range of services to improve their efficiency, profitability and sustainability.”
(POPA et al. 2021, p. 9).

The selection process did not pursue a restrictive definition of food hubs, but rather emphasised the local perspectives and the ownership of the idea. The programme director of *Civitas Foundation* confirmed that, even though originally not intentional, the diversity of the implemented business models favours the comparative assessment of the adopted strategies. The selected projects function according to their own business plan, nevertheless they share common economic and social aims, and operating principles (POPA et al. 2021):

- (1) the food hubs support the development of local communities by working with agricultural producers in proximity;
- (2) they are the only intermediary between consumers and local producers;
- (3) their legal form is the limited liability company and function as a social enterprise;
- (4) the food hubs and the producers they work with possess all the necessary operating permits;
- (5) the profit resulting from their activity will be reinvested in the further development of the food hubs and in social activities of the coordinating NGO addressed to farmers;
- (6) the food hubs act also as resource centres for farmers in order to increase their competitiveness.

The comprehensive websites of the food hubs offer diverse details about the listed producers and products. Regarding the legal form of the producers, we notice a broad spectrum, ranging from self-employed entrepreneurs, family businesses, agricultural cooperatives and social enterprises to even public limited companies. Most of the farms and food production units are family-run businesses. Agricultural cooperatives marketed by the food hubs are either in the dairy or vegetable producer sector, and merge small farmers of a couple of villages. Social enterprises included in the networks offer EU conform facilities to produce processed fruits and vegetables, enabling the commercialisation of the products.

Addressing the professional training of the producers, we can conclude that only few pursued higher education studies in the food sector, others completed advanced qualification trainings, but most of them have only practical experience. Their experience ranges from a couple of years to some decades in the field of agriculture or food production. Among the producers, there are also a few people with a career change, who turned from

former employments to agriculture or manufacturing of organic cosmetic and body care products.

Most of the businesses were started with own resources or with the support of family or friends. Yet, some companies (e.g., a fish farm, a certified organic apiculturist) benefited from financial assistance in the framework of the “Special Accession Programme for Agricultural and Rural Development” (SAPARD) of the EU. Few companies benefited from other EU-grants, or funds targeting small and medium-sized enterprises; some attained even private foreign investments.

The small farms and the small- and medium-sized food producers are mostly family based, yet some are creating seasonal or long-term employment for few people. Many of the companies manufacture in relatively small quantities and have no ambitions to grow and expand. However, some companies wish to diversify their product range and enlarge their production sites.

Besides the food hubs, most of the producers use other distribution channels as well: they sell their products among family members, friends and neighbours, go to farmer markets and fairs, run own (online) shops or market through retail shops specialised in local products. Innovative approaches to agriculture or food production, joining traditional recipes and contemporary technologies, or following new trends, e.g., switching from non-profitable maize production to a plantation of berries, attest the open-mindedness and entrepreneurial spirit of food hub producers.

Four of the five intermediary organisations provide a wide range of products. They strive to tender a diverse offer of product categories, to cover as far as possible consumer’s needs. The main food group is fruits and vegetables, either fresh or processed. Dairy goods – especially cheese – are well represented, as well as bread and pastry. Further product categories are alcoholic beverages, cold-pressed oils from different raw materials, vinegar, tea herbs, eggs, honey, sweets, meat and fish. The product range is largely consistent with the natural environment and climate conditions. The hilly landscape of the operation area of *Nord natural*, for example, favours livestock breeding, so their main product categories are dairy products.

The food hubs do not limit their product range to food and beverages. Several non-food products, like natural cosmetics and body care products are listed in their offer. *He-lyénvaló* lists also products of associations and cooperatives which promote and support traditional handicraft from the region. *Merindar* is specialised in honey products. In one of their rural development projects addressed to marginalised rural families, the coordinating NGO (*World Vision Organisation*) supplied numerous families with bee hives and trained them to be apiculturists. Since 2018, they buy the honey from the supported beekeepers and sell it nationwide under the brand *Merindar*.

The producers offer fresh and processed goods from own harvest and/or production. Several suppliers describe their products as certified “traditional product”, meaning that the product is

“produced within the national territory using only local raw materials, which do not contain food additives, is based upon a traditional recipe, a traditional production and/or processing method and a traditional technological process, and

	Food hub				
	Nod Verde	Helyénvaló	Roadé si Merinde	Nord Natural	Merindar
Coordinating NGO	Civitas Foundation for an Open Society, Cluj branch	Civitas Foundation for an Open Society, Odorheiu Secuiesc branch	Community Safety and Mediation Centre	Open Fields Foundation	World Vision Romania
Logistic centre	Cluj-Napoca (Cluj County)	Odorheiu Secuiesc (Harghita County)	Iași (Iași County)	Câmpulung Moldovenesc (Suceava County)	Criș (Brașov County)
Number of producers (POPA et al. 2021)	62	112	113	30	No data
Number of products listed (POPA et al. 2021)	411	2,200	830	570	Honey
Catchment area of producers (Dec. 2021)	150 km from Cluj-Napoca	75 km from Odorheiu Secuiesc	70–150 km from Iași	70–150 km from Câmpulung Moldovenesc	No data
Location of the producers (Dec. 2021)	About 65 % from Cluj and 20 % from Salaj County; the other from Mureș, Sibiu County	Over 65 % from Harghita County, about 20 % from Mureș County; the other from Covasna and Sălaj Counties	About 70% Iași County; the other from Suceava, Vaslui, Neamț, Botoșani, Bacău Counties	Over 50 % from Suceava County; about 25 % from Iași; the other from: Neamț, Buzău, Vrancea, Maramureș Counties	Brașov, Vaslui, Ialomița, Vâlcea, Dolj Counties
Shop	Online	Online and retail shop (2018)	Online and retail shop (2021)	Online	Online
Delivery system	Own vehicle; customer location delivery	Own vehicle; customer location delivery	Own vehicle; pick up meeting points	Courier services; customer location delivery	Courier services; customer location delivery
Outlet area	Cluj-Napoca and its urban fringe; Romania	Odorheiu Secuiesc + 30 km	Iași	Romania	Romania

Table 1: Overview of the five food hub projects

which is distinguished from other similar products belonging to the same category” (MADR 2013, p. 1; own translation).

The “Certified Romanian Food Products Catalogue” lists 2,883 certified products (December 2021) from various categories: beverages, meat, dairy, fruit/vegetable products, bakery, fish, honey and wine. From the numerous types of certification, most of the products (656) are certified as “traditional product” (AFIR). This type of products is mainly manufactured by smallholders and it could be a trademark to support their promotion (MADR 2021).

Besides traditional products, both food hub coordinators and producers, as well as consumers emphasise the aspect of “clean” when describing the quality of the offered goods. “Clean food” is not strictly defined, but it basically means environmentally friendly agriculture methods and food production activity (NISTOR 2015). The term “clean food” is mainly used as a substitute for “organic” or “bio”, which can only be applied based on certification (HAVADI-NAGY 2021). Many small farms produce close to the standards for organic agriculture, but without being officially certified. Some of the food hub producers contemplate certification as organic farmer/producer, yet the financial and bureaucratic burden restrains them from starting the complicated process. Others are in the conversion period to organic farming, or already certified organic producers (e.g., vegetable producers, apiculturists).

4.2 Functions and operations of the surveyed food hubs

Two different, but complementary goals define the functions of the food hubs. The *value-based* approach aims to create new distribution channels for the producers and to increase their profits. Through the new organisational model of regional aggregation they aim to scale up the local food production of small and medium-sized farms and companies. The motivation of the *sustainability* approach is a comprehensive sustainable development of the food production and of the communities, including food and nutrition security, and the reduction of the environmental footprint of the food production and consumption (MANIKAS et al. 2019).

Logistics

In the case of food hubs, this function refers to the active coordination of the actors involved in the supply chain to facilitate the flow of the goods from the point of origin to the point of consumption, meeting customer requirements and observing norms and rules imposed by legislation (BERTI and MULLIGAN 2016). All the food hubs of the pilot programme have a rented logistic centre and warehouse equipped with refrigeration facilities. This is where they receive the products and the orders and prepare the deliveries.

The majority of the suppliers are based in the same county as the logistic centre of the food hub, the rest are mostly from the neighbouring counties (see Table 1 and Figure 1). However, if the producer or the product is worth it, the food hub coordinators are willing

to accept producers outside their main coverage area. In some cases, the catchment areas of different food hubs overlap. In the case of *Merindar*, the honey comes from five of the counties where the coordinating NGO is active.

Originally, the outlet area of the food hubs differed as well: *Merindar* and *Nord Natural* delivered by courier system throughout the country, the others addressed to consumers located in the city of their headquarters: *Roade și Merinde* in Iași, *Nod Verde* in Cluj-Napoca and its urban fringe, *Helyénvaló* in Odorheiu Secuiesc. Lately, also *Nod Verde* opened up for nationwide delivery.

The food hubs have adopted a customer location delivery system, whereas *Nod Verde*, *Helyénvaló* and *Roade și Merinde* have their own delivery vehicle and the other two food hubs use courier services (see Table 1). The initiatives using their own vehicles have developed strategies for a more cost-efficient and environmentally friendly delivery, not only restricting the delivery to two days per week, but also trying to establish the shortest delivery routes (*Nod Verde*), or serving different neighbourhoods on different days (*Roade și Merinde*).

Marketing

This function involves, on one hand, seeking markets for producers and processors, and on the other hand it comprises all the activities needed for product differentiation. The food hub intermediary organisation functions as a network facilitator aiming to build and maintain long term relationships among food chain stakeholders through transparent communication and by creating a trusting environment (BERTI and MULLIGAN 2016).

The food hubs exert various strategies in identifying suitable producers. Recommendations, word of mouth (WOM), farmers markets, food fests, forums, producers' associations can be sources to find reliable and adequate suppliers. Similarly, the coordinators apply various methods to seek new markets and to acquire new customers: they are active on social media and present in the mass media, they participate with stalls on various events, such as occasionally farmer's markets or street food festivals, as well as farm visits and product tasting events. Various actions (e.g., vouchers, gift boxes) aim to strengthen customer loyalty.

The food hubs apply e-commerce and work as online shops. *Helyénvaló* had also a retail shop in Odorheiu Secuiesc from the very first, where clients can purchase the products on-site. *Roade și Merinde* opened a retail shop in 2021. The design of the web shop is consumer friendly and the food hubs provide altogether a transparent ordering, purchasing, payment and delivery process both off- and online.

The food hubs practice a re-territorialisation of the markets and food chains. In this process, they emphasise the product differentiation along three distinct dimensions: (1) quality, safety and healthiness of the products, (2) sustainability and (3) locality (SHARP and DAWES 2015; STEVENSON and PIROG 2008). Even though the producers comply with the national regulations regarding food safety and hygiene regulations, when addressing the quality of the products, they rather emphasise the "soft quality" aspects (BARBERA and DAGNESA 2016) and focus on the features of the involved actors and the local context. In the process of differentiation, they point out food distinguishing properties, such as natu-

ral and tasty, additive-free and high-quality; the commitment of the producers who work with passion, love and dedication, their consideration for the environment; the ecosystem services provided by the responsible agricultural production. In their branding and “story-telling” strategies, they focus on emotion and nostalgia (e.g., tastes of the childhood, granny’s meals), but also on local and regional identities.

In their pursuit of building effective information flows and transparency along the value chain, the food hubs facilitate online and offline communication opportunities and channels: (1) among producers and consumers (farm visits, tasting events, stalls at fairs), (2) consumers and food hub coordinators (newsletters, feedback platforms, events), (3) producers and food hub coordinators, (4) food hubs and general public (events, TV and radio broadcasts, newspapers and social media platforms). In the case of *Helyénvaló*, we can notice a further aspect regarding the communication: they adapted to the regional context, namely the strong presence of a national minority, operating their communication channels both in Hungarian and Romanian.

Product services

Product services refer to measures and activities which add value to the agricultural products (BERTI and MULLIGAN 2016). The food hubs perform no basic or value-added processing, and the goods are delivered in bulk (as in the case of fruits and vegetables) or in their original packaging. However, the food hubs provide for each purchase proper box packaging to ensure food safety and product quality during delivery.

Consultancy services for producers

Consultancy services for producers address the support provided by the food hub that can reinforce the capacities of the single individual producers, but also services to coagulate better the different actors of the network (BERTI and MULLIGAN 2016). The food hubs are knowledge providers for innovations, new technologies or agroecology practices. They conduct trainings and workshops for the professional development of the members. They provide technical (e.g., labelling regulations), marketing (e.g., packaging) and management consultancy services for producers. On request, the food hubs advise in the process of acquiring the legal permits and authorisations. They do not intervene in the production process and business management of the network producers, but they do make improvement recommendations (FILIP 2019).

Community engagement

This aspect refers to the role of the food hubs as knowledge providers or advisors for the larger public, beyond the network. This includes activities which raise awareness about the social, environmental and economic benefits of buying local and the short food supply chains (BERTI and MULLIGAN 2016). Unlike common intermediaries, food hubs are not just about selling foodstuff, but “*they are businesses with a social side*” (VANCU 2019; own translation). With active presence of the food hubs on various public events, fairs, festivals

and markets they participate at “buy local” campaigns. Beside disseminating the sustainability aspects of consuming local products, the food hubs of the pilot project provide on-farm educational experiences for children, organise seminars on healthy nutrition, food waste or healthy living in schools (IOSIF 2019). They basically advocate for ethical and responsible consumption. The original aim of reinvesting the profits of the food hub in actions dedicated to small farmers and rural areas indicates the fundamental social feature of the initiative.

Web of practices

This function refers to the role of the food hubs as knowledge developers and knowledge brokers. These intermediary organisations can provide learning, training and innovation services to the actors of the network, supporting the enforcement of the group in their endeavour of maintaining a web of agri-food practices (BERTI and MULLIGAN 2016).

The food hub coordinators share their experience and expertise at round table discussions, events, collaborative activities with invited experts, practitioners, officials, policy makers and other interested parties in rural development and short food supply chains (SFSCs). Therefore, their extended sphere of influence reaches beyond their members and their network. Besides opening market opportunities for small- and medium-sized farmers and food processors, the main purpose of the initiative is to develop policy recommendations on national level. Based on their experience, they drafted a handbook with practical advice and good practice for those interested in initiating a food hub (POPA et al. 2021), and formulated recommendations for public policies and proposals for the financial support of the food hubs to be included in the future “National Strategic Plan of Romania for 2021–2027”.

4.3 Chances and challenges

There are three possible paths of development for semi-subsistence farming (SSF) and small farms in the EU: They will either disappear owing to land consolidation measures or transform into small commercial farms. If they strive to persist, they will need to diversify the agricultural activity, or combine non-agricultural wage employment and part-time farming, or they can be forced to intensify the farm activity because of lack of other income sources (EP 2013). No single support measure is likely to be entirely appropriate for all types of farms and all development paths, but according to the programme director of the *Civitas Foundation*, short food supply chains (SFSCs) such as the food hubs could be a feasible solution for those who are starting an agriculture or food processing activity, or are taking the step from informal to formal economy, to increase the volume of production, or to work in agriculture full-time, basically small farmers and food processors, who need a launchpad, professional advice and an initial market.

These SFSCs could be an attractive alternative for the traditional food markets and a further outlet for the domestic agri-food production, as in 2018 only 20 percent of the Romanians purchased agri-food products from the market on a regularly basis (AAPR 2021). Considering the long-lasting trade deficit of the agri-food sector which in 2020 reached

up to nearly 2 billion Euros (MADR 2021a), and that Romanians consume more imported agri-food products, these local food systems based on the consumer-producer direct interaction could increase the consumption of autochthonous products. In this context, the food hubs could promote small farms, and be an appealing access to fresh and healthy regional agri-food products for conscious consumers.

The food hubs gradually developed during their first years of existence. They registered an increase in the number of producers, income, and consumers as well (see Table 2). They also diversified the product range and created new marketing strategies. However, this survey reveals several challenges regarding the products, the producers, the consumers, the management, and financing of the food hubs.

	2018	2019	2020	2021 January–July
Income (USD)	238,905	327,545	576,630	279,331
Number of producers	213	282	344	342
Consumers (households)	5,992	7,551	17,720	12,515
Consumers (legal persons)	73	378	249	192

Source: POPA et al. 2021; Remarks: Data for 2020: Income and number of producers include all the five food hubs of the project; Consumers (households and legal persons) include only three food hubs (*Nod Verde*, *Nord Natural*, *Roade și Merinde*). Data 2021: Data without Merindar, financed until the end of 2020.

Table 2: Achievement of the food hubs within the pilot project

The quality of the products and their traditional character is significant for the success of the food hubs. The demand on the market for local, healthy, and tasty products is increasing. The scaling-up and scaling-out process (CRABTREE et al. 2012) poses numerous challenges for the analysed food hubs. Improving accessibility and convenience for meeting customers' needs for healthy and fresh food, especially for low-income communities, is an aspect which the food hubs cannot solve by themselves. Offering fair prices for the producers and, at the same time, affordable prices for a large share of consumers, is a challenge many alternative food networks share, and could be probably tackled with public policies which support smallholders.

In their endeavour to promote autochthonous products, the aspect of the geographical distance from producer to consumer turned to be of secondary importance in favour of product quality and features of the producers. Providing the right quantity of products for an increasing demand in the upscaling process could be a challenge for the food hub intermediary organisations due to the limited number of authorised and reliable suppliers in some product categories (e.g., fresh vegetables or meat products). Even though the food hubs have offered their help to small vegetable farmers in the authorisation process, not all of them are interested, as they can sell their surplus in an informal system (e.g., family, friends, neighbours, in front of the gate) (VANCU 2019; FILIP 2019). Meat

products are high in demand, but producers, who comply with the quality requirements, are scarce.

For producers who get in touch for the first time with such concepts as the food hubs, it is a continuous process of explaining the way they function and that, besides the services they benefit from, they must comply with commitments. Producers need to understand that a food hub does not work like a wholesaler, and they need to be aware of the importance of delivery deadlines and observe the agreements (VANCU 2019). Furthermore, producers need to be willing to adjust their products to the wishes of the consumers, even if it is more about the aspect of the products (e.g., packaging, quantity, nutritional information) and not the quality.

Alternative food networks (AFNs) generally establish in urban agglomerations, with a middle-class population which has the resources and the interest in quality food. Even though more and more people want food that is fresh, less processed and sustainably sourced, the short food supply chains (SFSCs) compete for the share of interested population who possesses the necessary purchasing power to access these products.

The food hubs address two types of consumer groups: private households and legal persons, e.g., companies and the “Hotel/Restaurant/Catering” (HoReCa) sector. The food hubs registered significant changes in their consumer structure and income because of the measures imposed to counteract the spread of the Corona virus. During the first lockdown in Spring 2020, they achieved a strong increase of the incomes, owing to the reorientation of the consumers to online shopping. Regarding the consumers, the number of households doubled in 2020 (see Table 2), however, the number of the legal persons (e.g., HoReCa, companies) diminished, mainly due to the constraints inflicted by social distancing and home office activities. Independent from the current situation, the interviewed operational manager of the *Nod Verde* food hub based in Cluj-Napoca drafted the difficulties the food hub faces in accessing the HoReCa sector: For a successful long-term cooperation with restaurants and catering companies, they have to create services tailored to their needs and find compromises for reasonable prices and logistic flows.

The food hub coordinators emphasise the challenges they face as NGOs with a social agenda in managing an economic activity according to the rules of the market economy, determined by demand and supply, competitive prices and the purchasing power of the customers (FILIP 2019). “*We have approached everything from a community development perspective, but not necessarily from an economic profitability perspective*”, notes the coordinator of *Roade și Merinde* (IOSIF 2019, own translation). The programme coordinator of *Civitas Foundation* explains the difficulties NGO members encounter in fulfilling various functions and associated mindsets (e.g., NGO member, activist, businessman and project manager). In the course of time, a paradigm shift took place, whereby the community impact of the social enterprise kept its importance, but the economic viability of the venture obtained priority. Further on, the programme coordinators acknowledged the need of more qualified human resources (e.g., marketing, logistics, education actions) or even the externalisation of some tasks (e.g., delivery) for the efficient management of the initiatives and performance of the food hub activities.

Achieving self-sufficiency for each food hub is still the final aim of the pilot project. The *Romanian-American Foundation* (RAF) agreed to a follow up financial support till

the end of 2022 (POPA et al. 2021), so currently the food hub managers work on various promotion strategies (e.g., social media, influencers, degustation), new consumer bonding measures (e.g., vouchers, present baskets, discounts), improving delivery services, diversifying the product offer, improving the producers' efficiency and competitiveness, and finally strengthening the community.

Despite all the challenges and setbacks, the coordinators continue to have confidence in the model and in its value for Romanian rural areas. Under certain circumstances (e.g., financial and policy support), this model of aggregation and distribution of agri-food products, which couples economic targets with sustainability issues, has chances to be successfully scaled up on a national level. Therefore, the initiators of the pilot project advocate for the creation of agri-food aggregation centres. The "National Strategic Plan for Romania 2021–2027", in synergy with the Operational Programmes and the Structural Funds should prioritise the establishment and consolidation of territorial food systems and support short food supply chains (SFSCs) through higher funding for diverse eligible costs (e.g., manager training, investments in warehouse and logistic facilities, personnel costs for core employees, training and consultancy services for the farmers, logistic costs of the products aggregation and distribution) than former programmes (POPA et al. 2021).

5 Conclusions

In our survey about the food hub project initiated by the Civitas Foundation and financially supported by the *Romanian-American Foundation* (RAF), we assessed the functions and services provided by the five food hubs included in the pilot project, we addressed the producers involved in the networks, and we deliberated upon factors which could favour or threaten the development of food hub type alternative food networks in Romania.

We can conclude that this model of short food supply chains (SFSCs) aggregates a variety of producers, diverse in size and economic performance, product type and category. The food hubs are not just aggregators of local agri-food products or simple logistical warehouses, but they provide a number of vital services for small and medium-sized farmers. In their endeavour, they focus on improving the essential parameters of local food ecosystems: supporting small farmers in the process of authorising their economic activity, training small entrepreneurs in agriculture, exposing them to innovation and new environmental practices, obtaining certifications and ensuring product traceability, but also educating conscious consumers, and facilitating relationships between producers and consumers. A study on the consumer and producer satisfaction could complement the position of the coordinators on the functions and services offered by the food hubs, as well as costs and benefits of partaking at the network.

Civil society and the NGOs involved in rural development often assume the role of innovators, developing and implementing exploratory actions, and afterwards sharing their field experiences and insights with policy makers. While a strong cooperation among organisations involved in short agri-food supply chains is needed to create a critical mass

that has a greater influence on the decision makers and policy creators, the programme director of the *Civitas Foundation* confirmed the deficient collaboration among organisations involved in alternative food networks. Since the various initiatives of the alternative food networks (AFNs) share fundamental challenges (e.g., deficient access to financial resources for the small farms, lack of financial and human resources or policies in support of social enterprises, need for differentiated regulations and norms adapted to the size of agri-food producers), cooperation would increase their endurance and sustainability, and go beyond simple dissemination of lessons learnt.

Acknowledgements

This research was inspired by a short-term research stay at IAMO, i.e., the Leibniz Institute of Agricultural Development in Transition Economies, Halle (Germany) in August/September 2019 as part of a Leibniz Science Campus “Eastern Europe – Global Area” (EEGA) grant.

6 References

- AAPR – Asociația Administratorilor de Piete din România [Association of the Romanian Wholesale Market Managers] (2021). Sibiu: AAPR. – <https://pieteromania.ro> (last access: Dec. 23, 2021).
- AFIR – Agenția pentru finanțarea investițiilor rurale [Funding Agency for Rural Development] (2021): Catalogul Produselor Alimentare Certificate [Certified Romanian Food Products Catalogue]. Bucharest: AFIR. – <https://cpac.afir.info/AllProducts?culture=en> (last access: Dec. 23, 2021).
- Agraithaer GmbH and Leibniz-Zentrum für Agrarlandschaftsforschung (ZALF) e. V. (eds.) (2017): Future Foods Commons. Alternative Netzwerke zur Nahrungsmittelversorgung an der Schnittstelle zwischen Stadt und Land. – <https://www.isi.fraunhofer.de/content/dam/isi/dokumente/ccv/2017/FutureFoodCommons-Alternative-Netzwerke-zur-Nahrungsmittelversorgung.pdf> (last access: Dec. 23, 2021).
- BARBERA F., DAGNESA J. (2016): Building Alternatives from the Bottom-up: The Case of Alternative Food Networks. In: Agriculture and Agricultural Science Procedia, 8, pp. 324–331.
- BERTI G., MULLIGAN C. (2016): Competitiveness of Small Farms and Innovative Food Supply Chains: The Role of Food Hubs in Creating Sustainable Regional and Local Food Systems. In: Sustainability, 8 (7), pp. 616–647.
- BÎRHALĂ B., MÖLLERS J. (2014): Community Supported Agriculture in Romania. Is It Driven by Economy or Solidarity? Halle (Saale): Leibniz Institute of Agricultural Development in Transition Economies (IAMO) (= IAMO Discussion Paper, 144). – https://ageconsearch.umn.edu/record/182666/files/Birhala-Community_supported_agriculture_in_Romania_Solidarity_partnerships_as_viable_innovations-294_a.pdf (last access: Dec. 23, 2021).
- CRABTREE T., MORGAN K., SONNINO R. (2012): Prospects for the Future: Scaling Up the Community Food Sector. Research of the Cardiff University for the Making Local Food Work Program. Woodstock: Plunkett Foundation. – <https://jeanetwork.org> (last access: Dec. 23, 2021).
- DELIBAS H. (2021): Trust and the Clean Food Imaginaries: An Analysis of a Short Food Supply Chain from Romania. In: Future of Food: Journal on Food, Agriculture and Society, 9 (2), pp. 1–13. – <https://www.thefutureoffoodjournal.com/index.php/FOFJ/article/view/365>.

- EC – European Commission (2020): Farm to Fork Strategy. For a Fair, Healthy and Environmentally-Friendly Food System. Brussels: European Union. – https://ec.europa.eu/food/system/files/2020-05/f2f_action-plan_2020_strategy-info_en.pdf (last access: Dec. 23, 2021).
- EC – European Commission (2021): Statistical Factsheet Romania June 2021. Brussels: European Union. – https://ec.europa.eu/info/sites/default/files/food-farming-fisheries/farming/documents/agri-statistical-factsheet-ro_en.pdf (last access: Dec. 23, 2021).
- EP – European Parliament, Directorate-General for Internal Policies, Policy Department B, Structural and Cohesion Policies, Agriculture and Rural Development (2013): Semi-Subsistence Farming: Values and Directions of Development. Brussels: European Union. – [https://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/495861/IPOL-AGRI-ET\(2013\)495861_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/etudes/join/2013/495861/IPOL-AGRI-ET(2013)495861_EN.pdf) (last access: Dec. 23, 2021).
- EU – European Union (2019): Agriculture, Forestry and Fishery Statistics. 2019 Edition. Luxembourg: Publications Office of the EU (Collection: Eurostat Statistical books). – <https://ec.europa.eu/eurostat/web/products-statistical-books/-/ks-jk-19-001>.
- Eurostat Agriculture (2021): Farm Indicators by Agricultural Area, Type of Farm, Standard Output, Sex and Age of the Manager and NUTS 2 Regions. Luxembourg: Eurostat (Eurostat Data Browser). – https://appsso.eurostat.ec.europa.eu/mui/show.do?dataset=ef_m_farmang&lang=en (last access: Dec. 23, 2021).
- FILIP O. (2019): Rețeaua de alimente. Poate un magazin online să fie o punte de legătură între producători și consumatori? [Food Nnetwork. Can an Online Shop Be a Bridge Between Producers and Consumers?]. In: DOR Decât o Revistă. – <https://www.dor.ro/reteaua-de-alimente/> (last access: Nov. 8, 2021).
- FREDRIKSSON L., BAILEY A., DAVIDOVA S., GORTON M., TRAIKOVA D. (2017): The Commercialisation of Subsistence Farms: Evidence from the New Member States of the EU. In: Land Use Policy, 60, pp. 37–47.
- GRAMZOW A., BATT P. J., AFARI-SEFA V., PETRICK M., ROTHHAERT R. (2018): Linking Smallholder Vegetable Producers to Markets – A Comparison of a Vegetable Producer Group and a Contract-Farming Arrangement in the Lushoto District of Tanzania. In: Journal of Rural Studies, 63, pp. 168–179.
- HAȘDEU B. P. (2014): Best Practices from the GRUNDTVIG “Local Heritage in the Mirror of Europe” Project Partner Countries. – <https://www.semanticscholar.org/paper/BEST-PRACTICES-FROM-THE-GRUNDTVIG-%E2%80%9CLOCAL-HERITAGES-Ha%C5%9Fdeu/f9d49aefe16bf4d5743c5313f53c2dd6cd763543> (last access: Nov. 8, 2021).
- HAVADI-NAGY, K. X. (2021): ROA Cluj: REKO Type Sustainable Marketing Network in Romania. In: Territorial Identity and Development, 6, 2, pp. 5–24.
- IOSIF A. (2019): Afacerea ta are 200.000 de dolari. Cum i-ai folosi? La Iași, Roade și Merinde vrea să fie punte între producători locali și consumatori [Your Business is Worth \$200,000. How Would You Use it? In Iasi, Roade și Merinde Wants to Be a Bridge Between Local Producers and Consumers. In: DOR Decât o Revistă. – <https://www.dor.ro/afacerea-ta-are-200-000-de-dolari-cum-i-ai-folosi> (last access: Nov. 8, 2021).
- MADR – Ministerul Agriculturii și Dezvoltării Rurale [Ministry for Agriculture and Rural Development] (2013): Certification of Traditional Products. Procedure. Bucharest: MADR. – <https://www.madr.ro/docs/ind-alimentara/produse-traditionale/ordin-privind-atestarea-produse-lor-tradi%C8%9Bionale.pdf> (last access: Nov. 8, 2021).
- MADR – Ministerul Agriculturii și Dezvoltării Rurale [Ministry for Agriculture and Rural Development] (2021): Programul Național de Dezvoltare Rurală pentru perioada 2014–2020 [National Programme for Rural Development 2014–2020]. Bucharest: MADR.

- <https://www.madr.ro/docs/dezvoltare-rurala/2020/PNDR-2014-2020-versiunea-X-aprobata-04.05.2020.pdf> (last access: Nov. 8, 2021).
- MADR – Ministerul Agriculturii și Dezvoltării Rurale [Ministry for Agriculture and Rural Development] (2021a): Analiza SWOT, Planul National Strategic 2021–2027 [National Strategic Plan 2021–2027, Swot analysis]. Bucharest: MADR. – https://www.madr.ro/docs/dezvoltare-rurala/PAC_dupa_2020/2020/DRAFT-Analiza-SWOT-Plan-National-Strategic-2021-2027.pdf (last access: Nov. 8, 2021).
- MANIKAS I., MALINDRETOS G., MOSCHURIS S. (2019): A Community-Based Agri-Food Hub Model for Sustainable Farming. In: *Sustainability*, 11 (4), pp. 1017–1034.
- MÖLLERS J., TRAIKOVA D., BÎRHALĂ B., WOLZ A. (2018): Why (Not) Cooperate? A Cognitive Model of Farmers' Intention to Join Producer Groups in Romania. In: *Post-Communist Economies*, 30 (1), pp. 56–77.
- NISTOR L. (2015): Discourses About The Meaning Of The Local Food. Investigations In Romanian Urban Contexts. In: Institute For Sociology Centre For Social Sciences (Ciss) (Ed.): *The Social Meaning Of Food*. Budapest: Institute For Sociology, Ciss (= Socio.hu – Social Science Review Online Journal, Special Issue In English, No. 3), pp. 128–144. – https://socio.hu/uploads/files/2015en_food/nistor.pdf (last access: Nov. 8, 2021).
- OPITZ I., SPECHT K., PIORR A., SIEBERT R., ZASADA I. (2017): Effects of Consumer-Producer Interactions in Alternative Food Networks on Consumers' Learning About Food and Agriculture. In: *Moravian Geographical Reports*, 25 (3), pp. 181–191.
- POPA A., MEIROȘU C., POPESCU R. (2021): FOOD HUB-UL. Model alternativ pentru dezvoltarea fermelor mici și mijlocii în România [The Food Hub. Alternative Development Model for the Small and Medium-sized Farms in Romania]. Cluj-Napoca: Centrul Roman de Politici Europene [Romanian Centre for European Policies], unpublished.
- RENTING H., MARSDEN T. K., BANKS J. (2003): Understanding Alternative Food Networks: Exploring the Role of Short Food Supply Chains in Rural Development. In: *Environment and Planning A: Economy and Space*, 35 (3), pp. 393–411.
- SANTINI F., GOMEZ Y PALOMA S. (eds.) (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 (= JRC Scientific and Policy Reports, EUR 25911).
- SEYFANG G. (2009): *The New Economics of Sustainable Consumption*. New York: Palgrave Macmillan.
- SHARP B., DAWES J. (2015): What is Differentiation and How Does It Work? In: *Journal for Market Management*, 17 (7), pp. 739–759.
- SMEDS J. (2015): Growing Through Connections – A Multi-case Study of Two Alternative Food Networks in Cluj-Napoca, Romania. In: *Future of Food: Journal of Food, Agriculture and Society*, 2 (2), pp. 48–61.
- STEVENSON G. W., PIROG R. (2008): Values-based Supply Chains: Strategies for Agri-food Enterprises of the Middle. In: Lyson T. A., STEVENSON G. W., WELSH R. (eds.): *Food and the Mid-Level Farm: Renewing an Agriculture of the Middle*. Cambridge, MA: MIT Press, pp. 119–143.
- 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, New Series*, XI (2), pp. 181–193.
- TANASĂ L., BRUMĂ I.-S., DOBOȘ S. (2015): The Role of Short Food Supply Chains in the Development of Smallscale Local Producers. Case study: Harghita County. In: *Agrarian Economy and Rural Development – Realities and Perspectives for Romania (6th Edition of the International Symposium, The Research Institute for Agricultural Economy and Rural Development (ICEADR), Bucharest*. Bucharest: ICEADR, pp. 286–293.

- VANCU A. (2019): Zece întrebări despre food huburi. Cum funcționează afacerile care conectează producătorii locali și consumatorii [Ten Questions About Food Hubs. How Businesses Work That Connect Local Producers and Consumers]. In: DOR Decât o Revistă. – <https://www.dor.ro/zece-intrebari-despre-food-huburi/> (last access: Nov. 8, 2021).
- WELLNER M. (2018): Landwirtschaft und Gesellschaft: Community Supported Agriculture als innovative Nische. Dissertation, Georg-August Universität Göttingen. – <https://ediss.uni-goettingen.de/handle/11858/00-1735-0000-002E-E4C7-3?locale-attribute=en> (last access: Nov. 8, 2021).