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(NON-) ENGAGEMENT OF SLOVENIAN HERBAL ENTERPRISES IN THE BALKAN HERB MARKET: HERBS AS A TEMPLATE FOR LOCALLY ORIENTED BUSINESS MODELS IN RURAL AREAS

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ABSTRACT
(Non-) Engagement of Slovenian herbal enterprises in the Balkan herb market: Herbs as a template for locally oriented business models in rural areas
The international herb market is a significant economic sector and is particularly important for less developed countries where most of the world´s herbs are grown. Countries of the Balkan Peninsula are significant herb suppliers, where cultivation and wild harvesting of the herb also plays an important social and cultural role. Historically, Slovenia has been an importer of herbs, mainly from Balkan countries. Within Slovenia, the herb industry has primarily been based on production and service activities, with operators selling most of their products on the local market. In our analysis, we examined (10) herbal enterprises whose business models include six important elements (product diversity, sales channels, the potential for expansion of the range of products, promotion, networking as well as the availability of labour and succession planning). These elements are strongly influenced by the characteristics of the operator or business owner, specifically, their age, formal education levels, age of the business (extent of business experience), and the reasons for starting a business. For businesses to be successful, linking of elements within the business model as well as connecting with the wider (business) environment are critical factors.

KEY WORDS
Herb industry, business models, rural entrepreneurship, herbal enterprises, rural development, Slovenia, Balkans

1. Introduction

From a global perspective, herb production is an important agricultural industry: demand for cultivated herbs is growing since cultivation alone ensures there is control over the quantity and quality of raw materials. Herb cultivation, harvesting, and processing are not just economically important but socially and culturally as well. In many countries, for a significant portion of the rural population, engagement in the herb industry is a main, or even the principal, source of income (Nurković, 2013).

Globally, there are around 3,000 species of commercially traded herbs (Dajić Stevanović et al., 2013), with around 2,000 herb varieties found in wider Europe, including 1,200 to 1,300 autochthonous varieties growing in natural habitats (Smernice razvoja…, 2016). Approximately 90% of herbs are still harvested in natural habitats (between 20,000 and 30,000 t per year), with wild-harvesting/wildcrafting commonly practiced particularly in Albania, Turkey, Hungary, and Spain (Smernice razvoja, 2016). Herbs from the Balkans represent a significant component of the global market for medicinal plants, with the area together with Southern Europe considered one of the richest sources of medicinal and aromatic plants. It is estimated that herbs from the Balkans account for about 8% of all global exports of medicinal and aromatic plants (Nurković, 2013). Despite recent trends showing an uptick in the processing of herbs before exportation, thus processing in the country of origin, extraction, and other forms of processing are still mostly carried out in Western European countries (Smernice razvoja, 2016).

The Socialist Federal Republic of Yugoslavia (SFRY) was once a major supplier of medicinal and aromatic plants in Europe (Dajić Stevanović et al., 2013), and within it, Croatia was one of the world's major exporters of lavender and chamomile. In the1980s, political factors, especially following the breakup of Yugoslavia and the end of military conflicts, also led to transformations in the herb and herbal products markets (Šiljković, Rimanić, 2005). The leading role once held by SFRY in this sector was taken over by Albania, Bulgaria, Hungary, Poland, and Slovakia (Dajić Stevanović et al., 2013).

This article focuses on the state of production, harvesting, and sales of medicinal and aromatic plants in selected countries of the Balkan Peninsula, with particular emphasis on herb market linkages with the Republic of Slovenia (RS), or put another way, it examines the (non-) engagement of Slovenian herb growers and harvesters as well as herbal enterprises in these networks. We focused our empirical research on herbal enterprises in Slovenia: the characteristics of the business owners, their business models, and their connections within the wider (business) environment.

1.1. Materials and methods

We analyzed the state of the herb industry in individual countries of the Balkan Peninsula through reviewing and analyzing literature, as well as by collecting and processing statistical data. In recent years, many scientific articles and professional papers have examined different aspects of herbal traditions and the herb industry in former Yugoslav countries, as well as in Albania, Bulgaria, and Greece, providing details on the state of production, harvesting, social aspects and traditional (folk) knowledge about herbs, while studies have also looked at the different building blocks and impacts of the herb industry (Imami et al., 2015; Dajić Stevanović et al., 2013; Nurković, 2013; Šiljković, Rimanič, 2005; Stenchok et al., 2018; Kathe et al., 2003; Rexhepi et al., 2013; Pashev, 2017; Popova, Mikhailova 2018; Valenčič, Spanring, 2000). Analysis of the literature revealed that there is a large amount of professional and scientific literature available that deals with the herb industry, rural development and herbal knowledge. However, it turns out that, particularly in the Slovenian context, there is a lack of comprehensive studies that would examine the herbal sector from different perspectives and/or evaluate its current role in rural development. Likewise, we did not come across studies dealing with connections between herbal businesses in Slovenian rural areas and marginalized population groups, such as Roma, drug addicts, the long-term unemployed or other vulnerable population groups, whereas these aspects have been examined by authors in Balkan countries (Nurković, 2013; Rexhepi et al., 2013; Imami et al., 2015). A particular focus within such research has been paid to issues concerning populations in post-crisis and peripheral (border, mountain) areas.

Given that the Slovenian market is strongly connected with markets of countries on the Balkan Peninsula (especially the countries of the former Yugoslavia), we searched for statistical data on the state of medicinal and aromatic plant industries in these countries as well. We sought out data on the production of medicinal and aromatic plants in statistical databases/portals of individual countries as well as in the literature. We encountered several hurdles to obtaining appropriate data because some countries manage medicinal and aromatic plants separately (e.g. the Republic of Croatia) and some have officially such a low proportion of production (e.g., the Republic of Northern Macedonia) that statistics on the production of herbs are not presented as a separate category. For the Republic of Croatia the data were obtained from the statistical portal HR-STAT, where they are specifically categorised (Crop production, Harvested area, Production and yield of crops in hectares, tons and t/ha, Aromatic, medicinal herbs and spices; in Croatian: Biljna proizvodnja, Žetvena površina, proizvodnja i prirod oraničnih usjeva u hektarima, tonama i t/ha, Aromatsko, začinsko i ljekovito bilje). For the other countries presented, data were found in the literature (Rexhepi et al., 2013; Bjelić, 2012; Nurković, 2013; Dajić Stevanović et al., 2013; Imami et al., 2015; Sustainable herbal…, 2019).

The methods used to collect and analyse statistical data proved to be effective in providing a general overview when it comes to the state of commercial production of medicinal and aromatic plants in Slovenia, although they also had some shortcomings. Official statistics do not accurately capture the actual state of the herb industry in Slovenia. A large proportion of the herbs for sale on the market in various forms, particularly when produced by small businesses, organic farms, or through personal supplementary work, are harvested in the natural environment, and these quantities are not recorded in official statistics. In Balkan countries, official statistics are very deficient: due to the economic and social situation in individual countries (herb harvests are essentially based on foraging and are a source of livelihoods), where a lack of oversight and a large informal economy mean statistics do not reflect actual conditions; an issue that has also been raised by Nurković (2013).

Statistical data for Slovenia were obtained from the Statistical Office of the Republic of Slovenia (SURS) through the SI-STAT online database. We searched for data on the cultivation of medicinal and aromatic plants, as well as for certain general agriculture data (number of agricultural holdings, education of owners, land area, etc.). The latter were obtained from sections of the Farm Structure Survey (in Slovene: Struktura kmetijskih gospodarstev; 2016). To gain an overview of the state of herb production in Slovenia, it was necessary to obtain data from two sections, specifically Crop production (in Slovene: Popis poljščin), figures for which are produced annually, and the Census of Market Horticulture (in Slovene: Popis tržnega vrtnarstva), which is carried out every three years (most recently in 2016). Data from the Census of Market Horticulture and Crop production report differ from each other, which is probably because part of the latter is not captured in the horticulture census because the herbs are incorporated into crop rotations and/or are not intended as commercial crops. The Census of Market Horticulture was first conducted in 2000 and covered all commercial horticultural producers producing horticultural crops for sale, irrespective of the size of the area used for this activity (Metodološko pojasnilo, 2017).

In-depth semi-structured interviews were used as a method to gain insight into the business models of herb growers and harvesters as well as other herb-related operators in Slovenian rural areas. To capture as best as we could the diversity of business models among herbal enterprises, we sought out respondents with different business models, from different statistical regions and landscapes in Slovenia; respondents also varied in terms of how their operations were officially structured (sole proprietor, supplementary on-farm activity, association, limited liability company-LLC). From February 2018 to January 2019, we conducted a total of 10 interviews with herbal enterprise owners and business owners offering herb related services. These were transcribed, and thematic analysis was undertaken, which was performed using Atlas.ti software that aided in processing the substantial volume of gathered material (105 pages).

2. International production and trade of herbs

The largest producer of medicinal and aromatic plants is China, followed by India. The total value of global annual trade in medicinal and aromatic plants is between 40 and 60 billion USD (Nurković, 2013). Demand for medicinal and aromatic plants on the international market, especially in Western European countries, the United States of America (USA) and Canada, is continually increasing (Dajić Stevanović et al., 2013). By 2050, trade-in them is expected to be worth five trillion USD (Nurković, 2013). The world's largest exporters of herbs and spices are India, the USA, China, Egypt, and Turkey. The largest importers of herbs in the world are Hong Kong, Japan, the USA, Germany, and France. The latter are the largest importers of herbs in Europe, together with Italy, importing 64% of all herbs into Europe (Dajić Stevanović et al. 2013).

2.1. European herb market

Demand for medicinal and aromatic plants is also growing within the European market. Market reports (Which Trends Offer… 2018) attribute this to trends such as healthy living and related dietary changes (e.g., organically produced food) as well as the interest in new and exotic flavours (Mexican, Chinese, Indian, Vietnamese cuisines). Herbs and spices are therefore increasingly being used, including as a substitute for salts, sugars, and various synthetic dietary supplements. While as demand continues to grow, causing prices to rise, European buyers are constantly on the lookout for new suppliers. Consumers are also paying more attention to social and environmental aspects, with importance placed on provenance and the production methods of herbs and spices (environmentally and worker-friendly production practices, fair trade...; Which trends offer…, 2018).

Globally, in 2015, sales of fair-trade herbs, herbal teas, and spices reached 3,400 t, up 44% compared to 2014. Of this, 40% was sold in the UK, followed by the USA (34%) and a combined total of 26% in Germany, France, the Netherlands, and Switzerland (Exporting sustainable spices…, 2018). The majority of imports into the EU are handled by a small number of brokers and traders. In recent years, direct sales channels have also been established between medium and large producers in economically less developed countries and processors serving consumer markets. In 2014, the EU imported 533,000 t of herbs worth EUR 1.9 billion. The volume of imports grew at a 3.9% annual growth rate between 2010 and 2014. Direct imports from economically less developed countries (China, India, Mexico, Egypt, Chile, Morocco, and Albania) in 2014 amounted to

302,000 t, worth EUR 1 billion (Smernice razvoja…, 2016), and by 2017 imports had increased to just under 400,000 t. The annual growth rate between 2013 and 2017 of imports from economically less developed countries was 6.6% (Which trends offer…, 2018). In addition to the herb, as mentioned above, suppliers to the EU, Vietnam, Indonesia, Brazil, and Peru are also major source countries.

Important importing countries of herbs into Europe include the Netherlands, the United Kingdom, and Spain. In recent years, most Western European countries have seen increases in imports of herbs from economically less developed countries. Whereas, most Eastern European countries have been reducing imports of herbs from economically less developed countries in recent years and increasing their procurements within the EU internal market, which has been driven by their integration into the EU in 2004 and 2007 (Smernice razvoja…, 2016). Demand for various herbal and spice mixes is also increasing in the European market. Since 2013, imports of such products have increased by 6.3%. In 2017, they accounted for 11% of imported herbs and spices from developing countries (Which trends offer…, 2018). Within the EU, medicinal and aromatic plants are cultivated on approximately 62,700 ha of land (Dajić Stevanović et al., 2013). In 2014, the EU exported 289,000 t of herbs worth EUR 1.2 billion. In 2014, internal trade within the EU common market accounted for 67% of exports. The main exporters of herbs were the Netherlands, Spain, and Germany (Smernice razvoja…, 2016).

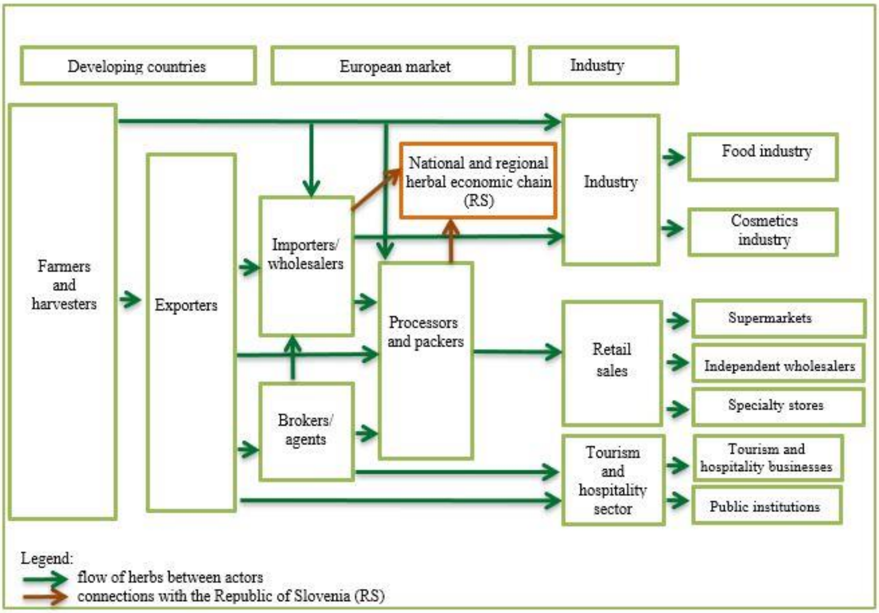

Figure 1: Schematic of herb sales in the European market as well as links to the Slovenian and regional herbal economic chain.
Source: Through what channels…, 2018; Developed and designed by Barbara Gornik, 2019.

Figure 1 shows the main actors involved in the production and harvesting, processing, and sale of herbs in the European market as well as connections with the Slovenian national and regional herbal economic chain.

Importers and wholesalers serve as intermediaries between exporters and their customers (clients). They buy large quantities of herbs and spices that they sell at a higher price. In most cases, importers have very strong connections with their suppliers, based in a range of countries, so that supply can be maintained throughout the year. Very often, importers also carry out the processing and packaging of herbs. They usually specialize in certain production processes to ensure the highest quality of raw material. Brokers and agents are the ones who make connections between retailers and downstream purchasers. Processing and packaging companies typically purchase fresh herbs and spices, which they then clean, sort, grind, blend, and package. The products are then resold. However, of late it is becoming ever more common for processing and packaging companies to purchase raw materials directly from producer countries, since it is easier for them to monitor the quality of raw materials, while it also means they can extract higher price differentials (Through what channels…, 2018).

The main users of herbs and spices in Europe are industry (70-80%), retail (15-25%), and the hospitality and tourism sector, together with various (public) institutions (5-10%). The industrial sector mainly consists of the food and cosmetics industries. The highest demand comes from the meat processing industry and among producers of baked goods and confectionery products. Retail sales channels include supermarkets, independent wholesalers, and specialized stores, in which sales are mostly of individually packaged herbs or herbal mixes. It varies from country to country through supermarkets sell between 60 and 90% of herbs and spices in this segment. The third and smallest segment covers the hospitality and tourism sector, together with (public) institutions. These include hotels, various restaurants, and catering providers, businesses, schools, hospitals, etc. In contrast to the industrial sector, which principally focuses on the quality, taste and colour of herbs and spices, this segment focuses primarily on high-grade and/or certified produce. The hospitality and tourism sector in particular constantly seeks out new exotic flavours and combinations. They generally purchase raw materials in larger packages from specialist providers (Through what channels…, 2018).

2.2. The significant role of Balkan countries in the production and trade of herbs

A review of the production and trade of medicinal and aromatic plants in the Balkan Peninsula reveals that in most countries (Albania, Bulgaria, Bosnia and Herzegovina, Croatia, North Macedonia, Greece) it is an economically important industry. Especially in peripheral parts of Bosnia and Herzegovina (BiH), Croatia and Albania, where various political, economic and historical factors (lack of employment opportunities, modest size of agricultural holdings, high unemployment among women, unfavourable demographics and education structures, post-crisis economies, traditional knowledge and harvesting of herbs, favourable natural conditions for herb growth) mean that engagement in this industry has been extremely important, economically and socially, for local populations. In some areas (BiH, Albania), the herb industry could be characterized as a "female economy" or even a "survival economy". Although, due to low labour costs and the low prices of raw materials, this area is attractive to (larger) companies, including from Slovenia, that are engaged in exporting, importing, or reselling and processing of medicinal and aromatic plants for the European or global market.

The largest exporter of medicinal and aromatic plants on the Balkan Peninsula, and one of the most important in Europe, is Bulgaria, where 768 medicinal plants have been documented (Popova, Mihaylova, 2018). Similar to other Balkan countries, Bulgaria has a long tradition of harvesting and cultivating medicinal and aromatic plants. The annual amount of harvested and cultivated medicinal and aromatic plants is approximately 17 t (Sustainable herbal…, 2019). Most (75-80%) are harvested in the wild, with a smaller proportion produced through cropping. The most important medicinal and aromatic crops in Bulgaria are lavender, damask rose, chamomile, mint, lemon balm, coriander, valerian, milk thistle (Silybum marianum) and mountain tea (Sideritis) (Popova, Mihaylova, 2018). Most crops are produced for export markets, with exports generating more than EUR 25 million annually (Sustainable herbal…, 2019). Their main trading partners in Europe are Germany, Austria, the United Kingdom, and Cyprus, while herbs are also exported to the USA and Africa. Annually, only about 5% of the total amount of herbs cultivated and harvested end up in the domestic market (Bulgaria joins…, 2017).

Wild-harvesting and cultivation of medicinal and aromatic plants are also extremely important in Albania, both in socio-economic terms and from an international trade perspective. Herbs also play an important role in Albanian traditions and cuisine. More than 300 medicinal and aromatic plants have been documented in the country, 182 of which are relatively widespread. There is no real domestic medicinal and aromatic plant industry to speak of, except for a few instances of small-scale packaging of blended teas and essential oil production (Imami et al., 2015). Between 75,000 and 100,000 people are involved in harvesting and cultivating medicinal and aromatic plants in Albania. These are important activities and sources of income for the rural population, especially in mountainous and peripheral areas. More than 4,000 farms are engaged in the cultivation of these plants, cropping a total of 5,000 ha in 2004. Most of this cropland (80%) is in the Shkodra area. For some families, the activities can generate as much as 60% of all their income (Imami et al., 2015).

Harvesters, in particular, very often come from socially disadvantaged backgrounds, and their ranks include a significant number of older people, women, and children. Plants are harvested throughout the growing season (from early spring till late autumn). In most cases, they dry the herbs they harvest and cultivate themselves and sell them at local markets or to larger buyers. As growth in demand continues to rise, so too does the share of output from cultivation (Kathe et al., 2003), while there is also state support for expanding production. The main crops are sage, lavender, thyme, oregano, and lemon verbena (Imami et al., 2015).

Medicinal and aromatic plants are one of the most important export industries in Albania. Imami et al. (2015) report that 95% of all herbs cultivated and harvested are exported, while Kathe et al. (2003) suggest that according to some data, almost 100% is exported. In 2013, it exported 9,330 t of herbs worth USD 27.3 million. It mainly exports unprocessed plants, with essential oils representing a very small share of exports. In 2011, it was ranked 24th among the world's largest herb exporters. Its main export partners are Germany and the USA (together accounting for more than 50% of exports), while other significant partners include Turkey, Italy, and France.

Albania is thus considered an important supplier of unprocessed raw materials or partially-processed goods to the cosmetics, food, and pharmaceutical industries in many European countries and the USA. In 2013, 75% of all imported sage in the USA came from Albania. While there is a steady increase in demand for herbs on the world market and the herb industry is extremely important in Albania, the state and producers pay too little attention to improving the country’s production technology (Imami et al., 2015).

Croatia is also an important producer and exporter of medicinal and aromatic plants. It has approximately 600 documented medicinal, aromatic, and melliferous plants, of which 160 to 170 are harvested or cultivated, while 120 are used for various purposes, including as food, traditional folk medicines, bee pastures, juices, elixirs, oils, alcoholic beverages, etc. Even though there was major restructuring when it comes to the production and marketing of medicinal and aromatic plants during the breakup of Yugoslavia and after the end of the war, Šiljković and Rimanić (2005) note that there has been a steady growth in the production of lavender and chamomile.

A large proportion of chamomile and lavender products and the raw materials themselves are exported. The main buyers are Germany, Italy, Slovenia, Switzerland, Hungary, and former Yugoslav countries. Since 2005, France has also become an important partner, purchasing the highest quality chamomile for pharmaceutical purposes. B-Grade quality chamomile is utilized for the production of tea blends (Šiljković and Rimanić, 2005).

The Croatian Bureau of Statistics (HR-STAT) maintains and has made available online, data from 2000 on, detailing the total cultivated area and production of medicinal and aromatic plant and spice crops. In 2000, 1,863 ha were under cultivation, with production amounting to 1,098 t. By 2005, with only minor fluctuations, the area under cultivation and production had both increased. By this time, 3,988 ha was under cultivation, and output totaled 2,969 t.

Up until 2011, the amount of area under cultivation declined, while there were considerable fluctuations in production. Since 2011, the area of land in cultivation has been increasing continuously, from 3,157 ha in 2011 to 8,368 ha in 2017. Production fluctuated up until 2014, but since then has steadily increased, with output totaling 7,450 t in 2017 (HR-STAT, 2018; Figure 2).

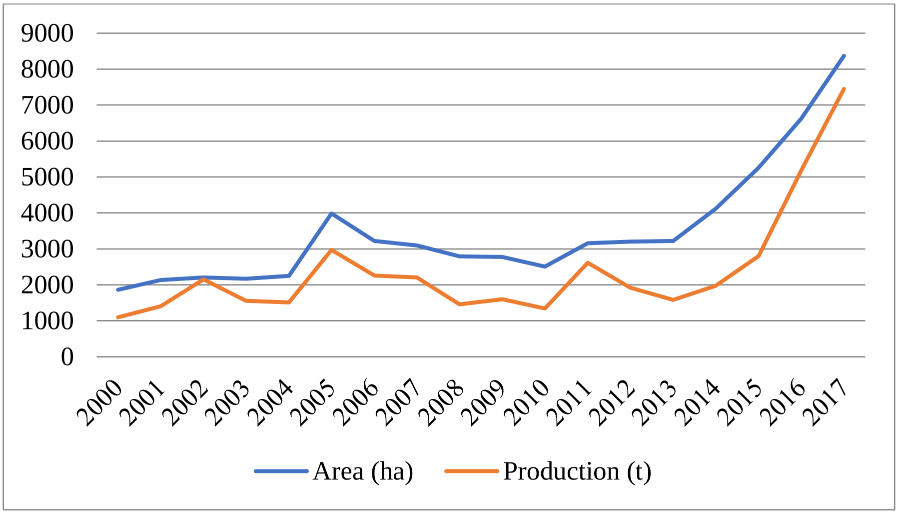

Figure 2: Area under cultivation and production of medicinal and aromatic plants and spices in the Republic of Croatia from 2000 to 2017.
Data source: HR-STAT, 2018.

The planting of medicinal and aromatic plants plays an important role in Croatia, not just economically but socially as well. Croatia, like other countries on the Balkan Peninsula, faces processes including depopulation, rural flight, overgrowth of agricultural land, and high levels of unemployment. Šiljković and Rimanić (2005) note that a lot of people aged 35 to 45 and with different Education levels (from unskilled workers to highly educated) have started cultivating chamomile along with other medicinal and aromatic plants, which has positive effects on addressing processes of deagrarization and depopulation, while also fostering greater social inclusion of different age groups (Šiljković, Rimanić, 2005). Connections between the cultivation of medicinal and aromatic plants and tourism are also important in the Croatian context.

Croatia is a significant tourist destination: in 2017, the country recorded 17,430,580 tourist arrivals, of which 15,592,899 were foreign visitors (HR-STAT, 2018). Some growers have recognized this potential and are selling various herbal products as souvenirs and as traditional Croatian products (Šiljković, Rimanić, 2005).

Herb harvesting and cultivation also plays an important role in BiH. Of the more than 700 documented medicinal and aromatic plants in the country, about 200 are exported. Traditionally it has been an exporter of unprocessed medicinal and aromatic plants, though it is almost impossible to obtain accurate data on the quantities of medicinal and aromatic plants purchased, sold, or exported (Nurković, 2013). More recently, exports of essential oils have also increased. Bosnia and Herzegovina's main export partners are Germany, Croatia, Italy, Slovenia, Switzerland, and France (Analiza vanjskotrgovinske,… 2016).

Unlike in Croatia, where medicinal and aromatic plant harvests are very much dominated by crop cultivation that is promoted by the state through various measures (projects, subsidies), in BiH wild-harvesting of plants in natural habitats predominates. It is one of the main preoccupations of the rural population and is an important economic activity in rural BiH. About 50 small and medium-sized businesses located throughout the country are involved in buying, harvesting, and processing of medicinal plants. There are said to be around 100,000 wild-harvesters or wildcrafters (i.e., 2.9% of the BiH population) associated with them, who, alongside agricultural producers, are the main suppliers of raw materials (Nurković, 2013).

Generally, wild-harvesters are middle-aged and older people living in rural areas, whose income from the sale of harvested herbs is often their only source of income (Bjelić, 2012). Herbs are mostly harvested on state-owned land since access is not restricted. A very small proportion of herbs comes from cultivation. The annual quantity of harvested medicinal and aromatic plants is between 1,500 and 9,000 t. Most herbs are packaged and sold dried, generally in bulk as a raw material in 25 kg bags (Nurković, 2013). These goods often return to the domestic market in the form of finished products that retail at significantly higher prices (Bjelić, 2012).

As is occurring around the world, in BiH as well, interest and the number of businesses or organizations officially engaged in the cultivation of medicinal and aromatic plants on their land or else through contracted farms is increasing. Some companies produce the raw materials themselves and thus can exercise a greater degree of control over their quality, though most purchase plant material from wildcrafters and farmers (Nurković, 2013).

Medicinal and aromatic plants are estimated to be cultivated on 200 to 300 ha of land. With between 250 and 300 businesses involved in the production, of which about 20 have obtained organic certification (Bjelić, 2012). Given the small size of the retail market in BiH, only a small portion of medicinal and aromatic plants can be sold domestically. Despite this, businesses have opted to produce semi-finished products or products such as herbal teas, essential oils, tinctures, and cosmetics packaged for the retail sector, and such finished products tend to be exported to countries in the region (Nurković, 2013).

Most medicinal and aromatic plants harvested in BiH are exported, though, in spite of this, domestic production often cannot meet the requirements of the foreign market both in terms of quantity as well as quality and quality assurance of the raw materials or other products derived from medicinal and aromatic plants (Nurković, 2013). The Slovenian company Sitik LLC also purchases raw materials for its products from BiH businesses (Križaj, 2018).

Herb harvesting also has a long history in the Republic of North Macedonia, a country shaped, above all, by the interweaving of its interesting and turbulent history together with the effects of the coexistence of different national, ethnic and religious groups. Furthermore, Rexhepi et al. (2013) note that among the population they surveyed (Shar Mountain area), people tended to have very high levels of traditional knowledge, reflecting their strong experiential knowledge about local flora and its potential for medicinal and nutritional uses.

The very common use of medicinal and aromatic plants is also tied to religious practices, among both the Muslim and Orthodox populations. 85% of the medicinal herbs that grow in the Shar Mountain area are used to produce teas. It is believed that the very high tea consumption levels in the area are a legacy of the Ottoman Empire. During this period, only the upper classes could afford imported black tea, whereas common people sought out and enjoyed various substitute and imitation beverages (Rexhepi et al., 2013).

Despite these practices and traditions, there is practically no cultivation of medicinal and aromatic plants on agricultural land in the Republic of Northern Macedonia. Most are foraged in natural habitats, with businesses managing these wildcrafting practices. Many plants are also wild-harvested by the local population for their own needs. Obtaining data that would reflect the realities on the ground is practically impossible as there is also poor oversight and lacking laws in this field (Country report on…, 2005).

We tried to obtain data on the production and sales of medicinal and aromatic plants through the Statistical Portal of the Republic of North Macedonia; however, they do not provide data on medicinal and aromatic plants in a standalone category.

Rexhepi et al. (2013) suggest that most harvested medicinal and aromatic plants end up in local and town markets. They also point out the problem of unregulated and over-harvesting of certain medicinal plants that end up in both local and export markets. Another issue is that plant experts and custodians of traditional knowledge are older, and there is a very modest transfer of knowledge onto younger generations.

Among the countries of the Balkan Peninsula, Serbia and Montenegro play a less important role when it comes to the export of medicinal and aromatic plants. Montenegro's main partners are the Balkan countries, especially Serbia and Albania. In 2012, sales of medicinal and aromatic plants in Serbia totalled USD 24.5 million, out of which USD 19 million were from exports. The largest importer of herbs from Serbia is the EU (62%) and signatories to the Central European Free Trade Agreement (CEFTA; 35%). Despite favourable natural and geographical conditions in Serbia and Montenegro for plantation cropping of medicinal and aromatic plants, production remains stagnant. In Montenegro, the proportion of crop land devoted to medicinal and aromatic plants is negligible. In Serbia, medicinal plants (excluding spices) are cultivated on somewhere between 2,000 and 3,000 ha, which is about half what it was in the early 1990s. Plantation cultivation of medicinal plants is in such a state because of unguaranteed purchase, price fluctuations, complex technology for end processing, and high-quality standards for raw materials. Additionally, some medicinal and aromatic plants have very slow growth rates, with growers being able to harvest larger quantities of produce only after several years (Dajić Stevanović et al., 2013).

A review of the production and trade of medicinal and aromatic plants in the Balkan Peninsula reveals that in most of the studied countries, it is an economically important industry. Especially in peripheral parts of BiH, Croatia, and Albania, where for various political, economic and historical factors (lack of employment opportunities, modest size of agricultural holdings, high unemployment among women, unfavourable demographics and education structure, post-crisis economies, traditional knowledge and harvesting of herbs, favourable natural conditions for herb growth) engagement in this industry is of great importance, economically and socially for local populations. In some areas (BiH, Albania), the herb industry could be characterized as a "female economy" or even a "survival economy". While, due to low labour costs and the low prices of raw materials, this area draws attention from (larger) companies that are engaged in exporting, importing or reselling and processing of medicinal and aromatic plants for the European or global market.

3. (Non-) Engagement of Slovenian herbal enterprises in the Balkan herb market

3.1. Development of the herb industry in Slovenia since 1991

Before 1991, there was a developed industry around harvesting and cultivating herbs in Slovenia, and these herbs would be dried and subsequently aggregated within purchasing centers that catered to the needs of the food and pharmaceutical industries. In the 1970s and 1980s, in cooperation with the processing industry, Slovenian growers produced Claviceps purpurea (on cca. 3,000 ha), mint, lemon balm, chamomile (on cca. 50 ha) and valerian and purple coneflower (on cca. 20 ha). Herb production decreased from 70 ha in the 1980s to about 20 ha by 1994 (Smernice razvoja…, 2016), and in 2001 only 12.1 ha were devoted to herb cultivation. Records show that growth restarted in Slovenia only after 2010. Between 1991 and 2017, we have identified three developmental phases in the production of spices, fragrances, and medicinal plants in Slovenia.

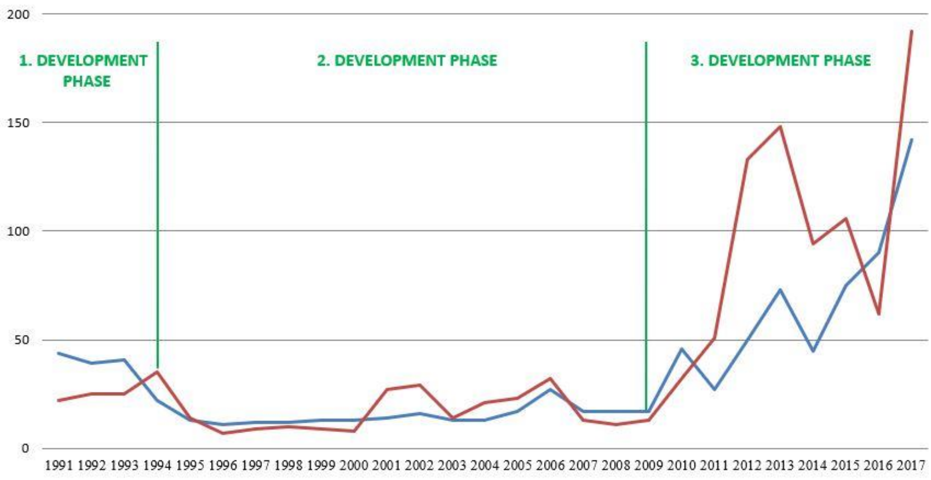

Figure 3: Production of spice, fragrant, and medicinal plants in Slovenia, 1991-2017. Data source: SURS, Pridelava poljščin (Crop production), 2019.

The first development phase (from 1980s-1994) saw a continuation of the situation as it was just before and during the breakup of Yugoslavia. This very short period is marked by a gradual decline in plantings of spices, fragrances, and medicinal plants, which was a consequence of several factors (Figure 3). We would stress the most important of which were the breakup of the unitary state and subsequent loss of the former (common) market, changed political and military circumstances in the countries in the region (the outbreak of war in the Balkans), the transition to a market economy, globalization of trade, and technological advances in the production of plant-derived active compounds.

The second development phase (1995-2009) is a logical consequence of the factors listed above. This is a period when Slovenia recorded an incredibly small total area of spice, fragrance and medicinal plant crops, as well as low aggregate production. The largest decline was recorded between 1996 and 2000. Data from the Census of Market Horticulture for 2000, 2003 and 2006 (Table 1) also reveal the extremely low values both for production of herbs, fragrances and aromatic plants for commercial purposes, as well as in terms of the number of agricultural holdings engaged in their production (SURS, 2016).

Table 1: Commercial production of herbal, fragrant, and aromatic plants, 2000-2016.

Indicator/Year	2000	2003	2006	2010	2013	2016
Production area - total (ha)	13.3	13.4	12.1	44	56.6	98.3
Number of agricultural holdings	64	64	57	142	253	262

Data source: SURS, 2016

The third development phase (2010–2017) is a period during which Slovenia, with a few fluctuations, recorded gradual growth in both the total area devoted to spice, fragrant and medicinal plant cultivation, as well as in production output. Since 2000, the area under cultivation with spices, fragrant and medicinal plants has fluctuated from year to year but is trending upwards compared to the previous period. There are several factors behind this situation: Slovenia's accession to the EU in 2004 and related developments (common agricultural policy, financial support from EU funds, the EU common market); the financial and economic crisis after 2008 and related changes in the economy; and, changing lifestyles, along with increasing awareness about the importance of healthy and locally grown food. In 2016, spices, fragrant, and medicinal plants were grown on 90 ha in Slovenia, while in 2017, the total area increased to 142 ha.

The situation is slightly different when it comes to production, which fluctuated considerably up until 2009, rose sharply in the years 2011-2013, and then fluctuated again. In 2016, Slovenia produced 62 t, while in 2017, output jumped to 192 tonnes, the highest it has been since 1991. It is important to note that the quantity of production also depends on plant type and weather conditions (distribution, quantity, and type of precipitation during the growing season, temperature, humidity) are also a key factor. In the third development phase, commercial production of herbs, fragrant and aromatic plants, and the number of agricultural holdings involved in producing them increased significantly, compared to the previous period. In 2016, 982 ha of herbs, fragrant, and medicinal plants were commercially produced by 262 out of Slovenia’s 69,902 agricultural holdings, thus 0.37% of all agricultural holdings (SURS, struktura kmetijskih gospodarstev, 2018).

Production took place on 3.9% of the land designated for commercial horticultural production. The production area of commercial cropped herbs increased by 54.3 ha from 2010 to 2016, and the number of agricultural holdings by 120 (SURS, 2016). Nevertheless, the total production volume is still extremely low, including when compared to the Balkan countries we have discussed.

3.2. Herb production as an entrepreneurial activity in Slovenian rural areas

The herb industry in Slovenian rural areas involves not just agricultural but also entrepreneurial activities carried out by actors through various registered forms (personal supplementary work, supplementary on-farm activity, sole proprietors, associations, LLC) and business models. According to the results of our research, recently, in Slovenia, the herb industry has seen a burgeoning of entrepreneurial activity, which includes wild-harvesting and/or production of herbs, their processing, and sale. We are seeing operators use short supply chains that, in rare cases, can also involve intermediaries. Most raw materials and products are of local or regional origin and are sold directly in local or regional markets. There are just a few exceptions (individual cases, usually large companies) where sales channels extend beyond regional and national levels.

Following the model of Dannenberg and Kulke (2015), which illustrates connections between the regional agricultural system and the horticultural supply chain, and based on the results of the research, we have articulated the regional herbal economy that operates within regional agricultural and business systems in Slovenia. The local and regional environment (other entrepreneurs, farmers, organizations) and a supportive environment for promoting agriculture and entrepreneurship (local action groups-LAGs, regional development agencies-RDAs, various advisory/extension services, etc.) are also part of this system. As the model shows (Figure 4), relationships and connections are established vertically and horizontally. The regional herb economy is made up of five key elements: production and harvesting of herbs (growers, harvesters, herb imports), processing (herb growers - businesses), sales (sales channels), consumption (households, retail sales, hospitality-tourism sector, and industry) and recycling (R) while there are also other elements (purchases, brokering) within the system that is similarly associated with sales.

Within the regional herb economy in Slovenia, herbs and herbal products reach end customers in three main ways.

- Via herb growers/wild-harvesters - herbal entrepreneurs who, in most cases, cultivate and/or forage herbs themselves in a local/regional environment (organic or conventional practices), process these herbs (into products, services) and sell them. Sales of products and/or services occur in a variety of ways and are targeted at different consumer groups.

Their most important and largest customer base are households, who are the principal outlet for their offered goods and services. It is less common for them to sell their products and services in the hospitality and tourism or retail sectors (specialized stores, local high-end grocers). The reasons for this situation vary, though often are linked to herb growers'/harvesters' - herbal entrepreneurs' limited quantity of raw materials and/or finished products and sales approaches (access to customers). For economic reasons, herbal entrepreneurs try to sell most of their products themselves and exclude intermediaries from their sales chains. Most herbs and products are sold within the local (place or municipality of residence) and regional environment. As the model shows, herbal enterprises play a very important role within the regional herb economy. Indeed, they often perform most, if not all, of the stages (from production to sales) within the regional value chain.

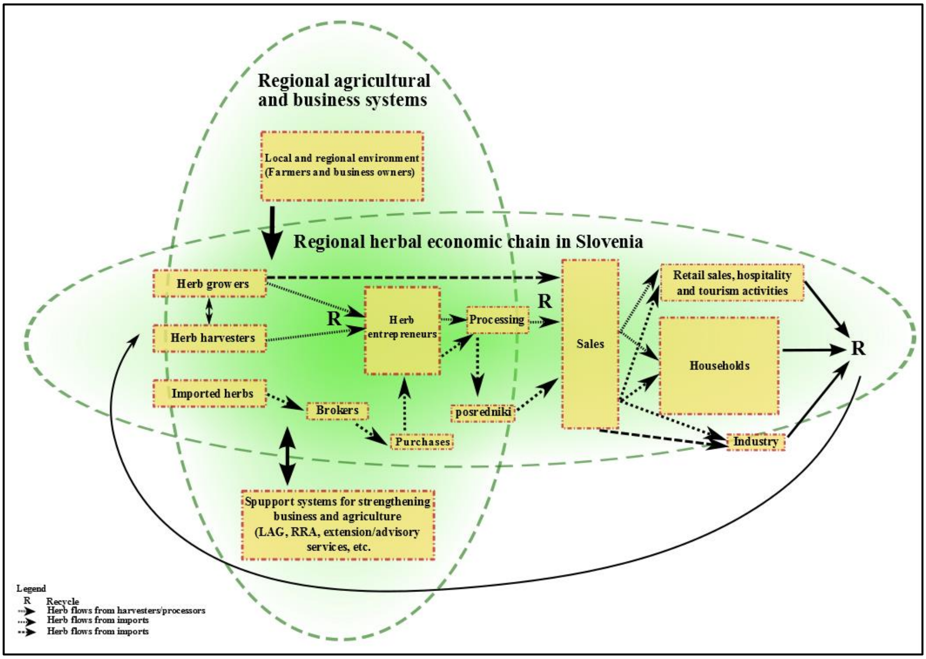

Figure 4: The regional herbal economic chain concerning regional agricultural and business systems in Slovenia.
Developed and designed by Barbara Gornik, Department of Geography, 2019

- Via producer cooperatives. In this case, it mostly involves agricultural holdings engaged in registered commercial herb production. These are cooperative producers within the industry who sell fresh, unprocessed herbs. In Slovenia, this sales model was previous strong when the country was part of Yugoslavia, while in the period since Slovenia gained independence, only a small number of larger companies (pharmaceutical, food) purchase fresh herbs. The industry does purchase raw materials from regional markets (e.g., via contracted producers), although their activity in the herb market extends beyond regional and national economic spheres.

- Via importers - intermediaries/brokers. A large proportion of herbs on the Slovenian market are imported, and these (in the form of products and semi-finished products) make their way into the regional herb economy. Some companies buy herbs on the world market, process them, and then resell them in the regional and national economy. In Slovenia, large companies typically operate in such a manner, often working with the assistance of intermediaries, their products reach households, industry, the retail as well as the hospitality and tourism sectors.

3.3.Connections between Slovenian herbal enterprises and Balkan countries

Slovenian companies are linked with Balkan countries, mainly through purchases of raw material. It is important to note that it is larger companies (either by themselves or through intermediaries) that are involved in such supply chains, and herb growers/harvesters - herbal entrepreneurs, are not involved in these connections. These smaller operators are strongly orientated towards the local and regional markets, and they harvest and/or produce raw materials for products themselves. What is more, they produce very small quantities of products (compared to large companies), which typically reach only individual specialty stores, but not restaurants, hotels, public establishments, or chain stores. This means that the majority of products sold to households and consumed in Slovenia are of foreign origin. For example, the Žito LLC company owns the ‘1001 cvet’ brand and sells 270 t of blended mountain tea per year in Slovenia alone, which equates to approximately 20 million cups of tea (Delo, 2019), which is significantly more than the total annual production of spices, fragrant and aromatic plants in Slovenia.

Slovenia's connections with Balkan countries will be presented below through a case study. It focuses on a company that is registered as a limited liability company, employs 20 people, and draws on the herbal heritage and knowledge of vicar Simon Ašič. Through its brand, the company is well established in the domestic market, with connections to large retail chains, and the company also sells its products abroad. As far as purchasing of raw material is concerned, it cooperates exclusively (with a few small exceptions) with foreign companies.*“Currently, Germany and Croatia, but of course herbs are generally mixed from different sources across Europe. Most herbs are of European origin, with some exceptions. Maybe some from North Africa, maybe Egypt or China.*

There is that one kilogram of green tea that we have." (Klemen Križaj, Manager of the company Sitik d.o.o., 2018)

"Sure, they are two companies, but then the plantations are different. Chamomile, for example, is from Croatia, common mallow is from Italy, milk thistle is from Poland. It just depends. In terms of Slovenia itself, I mean as I see and understand it... at the moment for home use it is okay, but for large quantities, it is not alright, we are such a big customer in this field; we have to use the space we have to meet these demands one way or another. In fact, for Stična, I think in terms of land, there would be too little just for us for nettles, to give you a sense."

The quality of the purchased ingredients is generally checked through the documents provided to them by the sellers or suppliers of the herbs. The respondent also stressed the importance of promptness and trust.

"Yes, this cooperation we have with the companies, it's all a matter of trust here. Sometimes, if some issue comes up, then this way of communicating is very important. And we are pleased with the Germans because they are prompt and provide the information that is needed, this is also arranged with the Croatian company, it is up to the mark. Maybe you can notice a slight difference in certain cases, but here it is pointless to be pedantic about it. So yes. In the end, if we are talking about quality, they take care of this, and that's important. And then we expect that from other companies as well. I mean there is one Slovenian company, which is also doing this on the coast and they have real quality and also their business approach and cooperating with them is alright, but then the price here was perhaps a little too high. It is necessary to look at the price of the raw materials."

As can be seen from the example, price, quality, and trust are important factors when cooperating and purchasing raw materials. The quality of the raw material is proven through laboratory testing; Slovenian companies check the quality themselves (through their analysis) only in very rare instances. They recognize that the companies they partner with do not grow the herbs themselves, but purchase them from harvesters and contract growers. Therefore, the actual control over the origin (growing habitat) and the production process is very lacking.

4. Business models of Slovenian herb operators - selected aspects

The modern herb industry in Slovenia consists of and is shaped by many actors (institutional and non-institutional), who have differing relations among themselves, including through established horizontal and vertical connections. We identified the main actors as being herb growers (farmers, businesses), herb harvesters (entrepreneurs, individuals with personal supplementary work), herb processors (businesses, farmers with registered supplementary activities), sellers both of products and services (businesses, farmers with registered supplementary Activities) and customers/consumers (households, businesses, public sector). An important, relatively new player in the herbal scene are herbal entrepreneurs, who tend to function as one person operations, with individuals playing the role of growers, harvesters, processors, and sellers (providers) of products and services, while somewhat more infrequently they are also buyers.

They enter the Slovenian market with different business models, and their structure and operation depend strongly on the personal characteristics of the entrepreneur and the environment in which the company operates. We have identified three types of herbal entrepreneurs, namely: an entrepreneur out of necessity, an opportunity entrepreneur, and an entrepreneur for personal fulfillment. The most common are opportunity entrepreneurs, who, due to the availability of different resources, maintaining a tradition (e.g., family, local) or through connections with other business owners or else by forging connections to an existing business, become entrepreneurs. In our case, entrepreneurs, for the sake of personal fulfillment, are people who perceive their entrepreneurial path as a lifestyle choice, a challenge, and the fulfillment of their idea. In such an instance, the financial profitability of the business is not generally the main focus.

The business models of Slovenian herbal entrepreneurs consist of six key elements, namely: product diversity, sales channels, the potential for expansion of the range of products, promotion, connections, and networks as well as the availability of labour and succession planning. The research has shown that these elements are highly dependent on the characteristics of the operator or entrepreneur, and specifically regarding their age, completed formal education, age of the company (entrepreneurial experience), and the reasons for starting a business. For businesses to be successful, linking of elements within the business model as well as connecting with the wider (business) environment are critical factors (Figure 5).

Our research acknowledges the diversity of herbal business models; because of highly individualistic approaches and less-developed connections with actors from the herbal landscape, some operators consequently have a smaller impact in their operating environment, which in turn also plays a smaller role in Slovenian rural development. Others establish a greater number of and/or strong connections with various actors in their region and thus play a greater role in the development of the Slovenian rural areas.

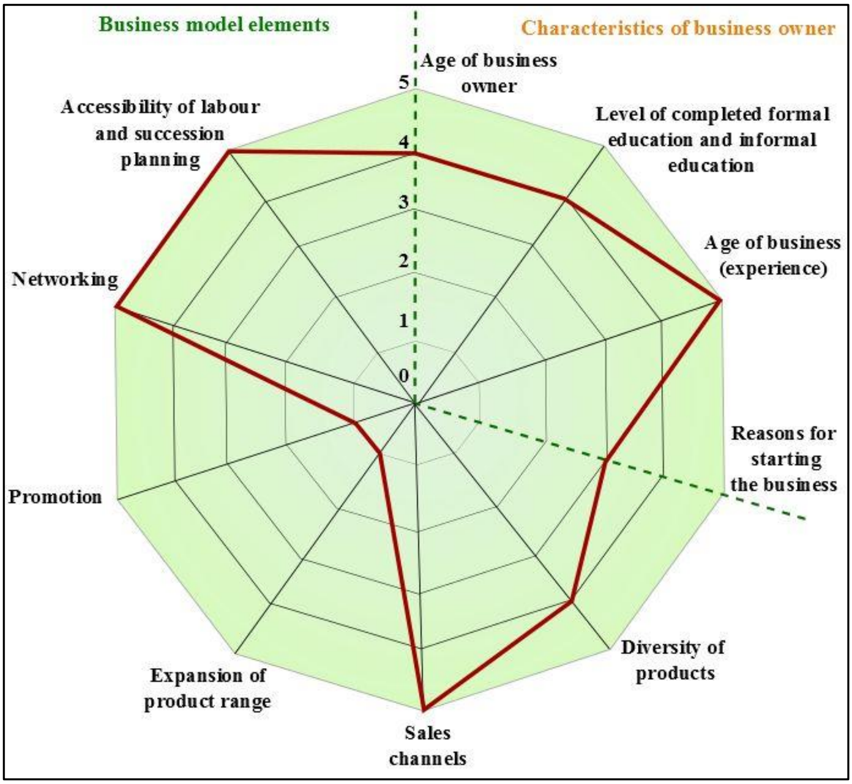

Figure 5: Schematic representations of the business model of a selected herbal business owner.
Developed and designed by Barbara Gornik, 2019.

Herbal entrepreneurs are highly individualized and tend to be very cautious or even sometimes distrustful of connecting and engaging in networks or larger systems (cooperatives, collaborative branding, retail chains). Most of them, do, try to connect with different actors in the area (LAGs, development agencies, educational institutions, municipalities), but mostly in connection with education, promotion, and sales of their products (in terms of sales to the end customer). There is less collaboration when it comes to purchasing of raw materials from other producers and suppliers or else in terms of sales through agents. In general, herbal entrepreneurs want to produce and sell products themselves, for which they give different reasons: from traceability of raw material in production and control over production and quality of the product to knowing their customer base and personal (individual) interaction with them (explaining what's in the product, advising how to use it properly, requesting feedback). Of course, the fact that they avoid intermediaries in this way and thus generate a greater return is also very important.

That said, most herbal entrepreneurs commented that they would be willing, providing conditions were acceptable, to market products under a new common brand if it would be developed. On this matter, they stress that they would want their logo or brand to remain recognizable, such that the look of the products under the new brand name would not change significantly. This is another example of the individuality of herbal entrepreneurs. At the same time, most entrepreneurs are aware of the constraints stemming from their business model (lack of time, being overburdened, availability of labour, quantities of raw materials) and acknowledge that it would be very difficult to provide sufficient quantities of products to supply larger retail chains. Even connections within the industry and among herbal entrepreneurs themselves, despite the potential positive effects on both production and sales, are very weak, a fact that entrepreneurs themselves are aware of. They point out that herbal entrepreneurs in Slovenia operate very much as individuals, and because of this, they often are not powerful enough and are not heard when it comes to amending legislation or other programs and strategies.

5. Conclusion and comments

In the context of international herb markets, Slovenia is a net importer of herbs and is an important partner of Balkan countries. Although most herbs on the Slovenian market come from imports, in recent times, herb production in Slovenia has been on an upward trajectory. Herb harvesting, which is a widespread recreational, agricultural, and entrepreneurial activity in Slovenian rural areas, has also seen significant changes recently.

The herb industry today involves multifunctional production-service activities in which entrepreneurship, traditional knowledge, agriculture, protection of the natural environment, and modern lifestyles intermingle. Actors in the industry operate through different registered forms; in some cases, entrepreneurs move through business development phases and hence reach a new, next-step in terms of business development, while in most cases the registration type is a result of the business model, and in the case of the herbal enterprises, above all, the envisaged products or services that will be marketed and the associated regulatory and financial constraints.

The ongoing development of the herb industry in Slovenia is tied to herbal entrepreneurs, their personality traits, and their capacity for identifying market opportunities. Although the herbal scene in Slovenia is very dynamic at the moment, and entrepreneurs with highly innovative business models are constantly entering it, there is justifiable concern about the ongoing development of the herb industry.

Most currently active herbal entrepreneurs included in the survey have no assistance (they complete all the tasks and phases of the work themselves), are over 45 years of age, and have no succession plans. This means that in the future, we cannot expect these entrepreneurs to expand their product range significantly.

As it is, they already admit that they are overburdened, and their business model does not provide (sufficient) earnings for another person. What is more, given the age of the entrepreneurs, we can expect that they will gradually retire and/or scale back or cease their operations. As most herbal entrepreneurs have no designated successor, we can expect that these companies will gradually close in the future. This will present a new challenge for the herb industry. We can expect that this change will continue to reverberate into the future. The state will also have to play a role since the herbal industry is still far from being properly regulated systematically. Another challenge for the herb industry to tackle will be for herbal entrepreneurs to forge and maintain connections among themselves.

Currently, such connections are very weak, although they will be indispensable for the further development of the industry (and rural development). Similarly, important steps need to be taken to more closely integrate the herb industry with the hospitality and tourism sector, where some herbal entrepreneurs already recognize various business opportunities. In the future, formal education and public education at all levels will have to contribute more to the further development of the herb industry. Educating children and adolescents on how to recognize herbs, as well as about the cultivation and use of medicinal plants, is of critical importance both for the conservation and transfer of knowledge as well as for the functioning of the herbal landscape and rural development.

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