Impact of SMEs on Local Economic and Social Communities from the Perspective of Small Enterprises Growing Medicinal Plants

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SUMMARY

In this study, we sought to answer how herbalists perceive the extent and quality of their contribution and impact on the life of small settlements from an economic and social perspective. We conducted semi-structured professional interview research with 32 herbalist professionals and 4 settlement leaders. The semi-structured interviews contained 32 questions for the growers. According to small herbalist businesses, tax revenues, job creation, settlement promotion and tourism are the most important types of impact with which participate in the life of settlements. They have a medium quality relationship with other enterprises and have a closer relationship with the residents of the settlements, but there are enterprises that have no relationship with the local population at all. We examined the impact of herbal medicine growing enterprises on their settlement in terms of 18 factors and in general environmental, health-conscious and ecological factors were rated highest by the interviewees.

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1. INTRODUCTION, RESEARCH QUESTION

The demand for medicinal plants is increasing, especially in the field of health treatments and beauty. 80% of the world's population still uses medicinal plants, primarily as medicine, according to research Variskhanov et al., 2024. In 2020, it was estimated that the value of herbal medicines and dietary supplements on Earth was 115 billion dollars (Witkittiluck & Kortana, 2021). Countries with high market value in the medicinal plant market were Japan, Korea, China, France, Germany and other Asian countries. In Thailand, for example, more than 300 types of medicinal plants can be found on the market (Variskhanov et al., 2024).

In a 1993 study, the WWF reported that the market for traditional medicine in Africa is constantly growing due to the high level of urbanization. As a result, wild medicinal plants are not enough or cannot be collected in sufficient quantities in many cases. The problem is that they are not collected sustainably (Cunningham, 1993). In South Africa, approximately 400-500 species of medicinal plants are sold, of which 99%, according to some sources, come from collection (Williams, 1996). In the Chiang Mai Declaration in 1988, experts already stated that in the long term, such a large-scale collection would make the current, unsustainable collection practice unsustainable. Instead, the emphasis should be on sustainable collection and cultivation as a suitable alternative (Bodeker, 2007). In India, it is estimated that 800 million health-conscious consumers and health professionals use more than 7,500 types of medicinal plants (FRLHT, 2002).

In a European study, in neighboring Slovakia, about 200 types of medicinal plants are currently used in healthcare (Salamon, 2014). In Romania, nearly 300 medicinal plants are used and known for therapeutic purposes. According to some research, 38 medicinal plant species in Romania have a higher collection potential, the amount of which may exceed 1,500 tons (Vasile et al., 2018). In total, researchers estimate that around 70,000 plant species are used in folk medicine on Earth today (Farnsworth & Soejarto, 1991). Cultivation of medicinal plants can therefore be a suitable alternative for sustainability and the production of high-quality raw materials (Farnsworth & Soejarto, 1991).

There are 50,000 plants on Earth that are currently known to have medicinal properties, which is almost 10% of all those discovered so far, which is a significant number (Table 1; Schippmann et al., 2002).

Table 1

Number of medicinal plants found on Earth

NAME OF COUNTRY SURVEYED	NUMBER OF PLANT SPECIES (PCS)	NUMBER OF HERBAL SPECIES (PCS)	%
China	26.092	4.941	18,9
India	15.000	3.000	20,0
Indonesia	22.500	1.000	4,4
Malaysia	15.500	1.200	7,7
Nepal	6.973	700	10,0
Pakistan	4.950	300	6,1
Philippines	8.931	850	9,5
Sri Lanka	3.314	550	16,6
Thailand	11.625	1.800	15,5
USA	21.641	2.564	11,8
Vietnam	10.500	1.800	17,1
Average	13.366	1.700	12,5
Earth	422.000	52.885	

Source: Own editing based on Schippmann et al., 2002

Herbal medicine cultivation can be carried out economically even on a relatively small area, it is not necessary to think in terms of tens of hectares, this activity provides an income-generating opportunity even on one or two hectares (Sokszínű Vidék, 2017).

There are approximately 400 medicinal plants in our country, which is a lot compared to other countries at a European level. This is due, among other things, to the extremely optimal climatic conditions (Bernáth et al., 2014).

Herbal medicines are appearing more and more frequently in the lives of small settlements, as many people, whether through local government maintenance or as private individuals, are starting to grow, process or sell them (Barabási, 2019). The demand for high-quality, high-active ingredient preparations is growing and this can be considered an international trend today (Marshall, 2011). In many cases, the cultivation of medicinal plants is carried out by small businesses, which can have a greater or lesser impact on local economic and social processes and communities, influencing the livelihood, tourism direction or even the image of a community (Pászk & Szűcsné Markovics, 2024a). In Hungary, we can also find many such settlements, where local governments have organized around medicinal plants as tourist attractions, for example Bükkszentkereszt (Barabási, 2019).

Often, a small settlement far from the interested party can be visited because of the medicinal plant growing businesses, since here it is often not only possible to purchase the finished product, but there is also the opportunity to visit factories and gardens, participate in workshops or even watch, try out and learn other processes from professionals (Pászk & Szűcsné Markovics, 2023). This can have a very positive impact on local communities, as it can boost tourism, accommodation bookings, local spending (e.g. catering establishments, grocery stores), increase the sales of locally produced, mainly artisanal, organic products, which can greatly contribute to the livelihood of the local population. After all, these small rural settlements, which are often deprived of major traffic, would otherwise be visited by few people. These processes and the presence of these businesses can therefore contribute to the viability and survival of settlements and communities in the long term (Pászk, 2024).

In this study, we sought to answer how herbalists see the extent and quality of their contribution and impact on the life of small settlements from an economic and social perspective. Currently, research on the domestic herbalist sector can be said to be incomplete, there is little literature available and even those that do examine the topic mainly from an agricultural perspective, rather than from an economic and social perspective.

2. LITERATURE REVIEW

2.1. Potential impacts of SMEs on local economic and social communities from the perspective of small herbal-medicine-growing enterprises

The analysis and examination of the social impact of companies is not yet given sufficient emphasis today, according to most sources, despite the fact that their impact is quite significant. After all, they employ people, pay taxes, carry out production and service activities, solve social problems and create significant value (Siemieniako et al., 2021). The impacts of companies on society can be very diverse due to their uniqueness, which is why it is difficult to make a complex, summary list of them, most literature only collects a few of them (Radácsi, 2021; Table 2).

Table 2

Some of the social impacts of companies

PART OF THE SOCIAL IMPACT OF COMPANIES		
improving living conditions	developing a more health-conscious attitude	creating environmentally friendly working conditions
poverty reduction	creating a cleaner environment	strengthening an environmentally friendly approach
creating a healthier environment	strengthening ecological awareness	building growing trust
improving individual skills and competencies	improving equal opportunities	strengthening social cohesion
creating a more open society	strengthening the civil sector	promoting volunteering
promoting social innovation	preservation and strengthening of local culture	ensuring more competitive education

Source: Own editing based on Radácsi, 2021; Reisinger, 2022

Most studies do not only highlight one economic or social impact from each factor, but also highlight several benefits that herbal farming businesses can contribute to the life of small settlements. Singh's 2025 study also highlights the development of the local economy, the promotion of female labor force participation, health benefits, and the preservation of biodiversity (Singh, 2025). Based on African examples, it can be said that medicinal plant cultivation can contribute to increasing the income of the rural population, improve sustainability, and open up new markets (Mofokeng et al., 2022).

If we wanted to create major summary categories for the economic and social impacts of small businesses, we could create the following 6 categories:

1. Job creation and local employment

Small herb-farming enterprises operating in small settlements often employ workers from the local population, thereby reducing unemployment, including in disadvantaged areas (Kulcsár et al., 2023). They can thus improve the local quality of life, local incomes and promote staying in the countryside (Csurgó et al., 2025).

2. Community cohesion and knowledge transfer

As mentioned earlier, small herbal-medicine-growing businesses often organize herbal medicine education programs for interested parties, where they present, among other things, the cultivation, processing, and possible uses of herbs. This can strengthen community cohesion and facilitate the transfer of knowledge (Szente et al., 2021).

3. Inclusion of women and disadvantaged groups

It is particularly typical that rural SMEs employ women or disadvantaged people, especially Roma women, as they can adequately perform seasonal agricultural work even without a degree (e.g. harvesting, sorting). This increases social

equality and promotes integration (Erdész-Kozak, 2008). A study involving 360 farmers in Iran found that herbal medicine cultivation increases the income of rural households, thereby reducing poverty (Dalir et al., 2024).

4. Improving health awareness and local quality of life

Products containing medicinal herbs, produced and sold by SMEs can greatly contribute to a healthy lifestyle and its promotion, which can improve the health awareness of the population and, as a result, even the quality of life (Pászk, 2024). According to another study, medicinal plants and their cultivation also play a significant role in healthcare in developing countries, as they can reduce healthcare costs (Wairimu, 2025).

5. Sustainability and environmental awareness

In many small towns, herbal medicine businesses are choosing organic or bio production, increasing the health benefits of their products and improving sales opportunities, as many people prefer to buy products free of chemicals and additives. SMEs can thus promote environmental sustainability (Benedek et al., 2020).

6. Stimulating local economy and tourism

The workshops and professional programs held by herbalists stimulate tourism, increase the benefits accrued at the local level, and expand the tourist offer in many areas of the country (Pászk & Szűcsné Markovics, 2024b). In addition to traditional knowledge, medicinal plants also appear as a resource that strengthens the local economy, according to research in Hungary and the Carpathian Basin (Molnár et al., 2025). International research also shows that herbal medicine businesses represent a significant source of income in rural communities (India, China) (Pergola et al., 2024).

Based on our previous research, the stakeholder analysis of the sector highlights that there is a close system of relationships between individual sector players and herbal medicine growing enterprises (e.g. suppliers, input suppliers, technology service providers). Thanks to this system of relationships, herbal medicine growing enterprises often cooperate with local service providers, providing work for several small-town enterprises. After all, whether it is a question of an agricultural mechanized work process or a large-scale procurement of seedlings, if the enterprise can solve it locally, then it will choose this (Pászk & Szűcsné Markovics, 2024b).

2.2. Some international and domestic examples of the community-building and supportive impact of herbal medicine growing businesses

We can find many good examples and good practices on Earth, both in Hungary and outside Europe. In the Romanian settlement of Lókod, the tourist appeal of the region was boosted with medicinal herbs and the professional programs related to them (Barabási, 2019). In India and China, since healing with medicinal herbs is still a present method today, there are great opportunities in the field of employment (Bodeker, 2007). Often, the medicinal herb sector can be the only source of income for rural women, especially in the less developed parts of Asia and South America (Marshall, 2011).

The Swiss-based Weleda AG cultivates herbs in a sustainable way, in collaboration with local producers, for whom it can provide a fixed income. In addition, the company supports local schools and events related to healthy lifestyles (Dalir et al., 2024). Pukka Herbs, operating in the United Kingdom, pays special attention to fair trade partners (sustainable cultivation and collection), to whom it pays a higher price for herbs, thereby supporting local organic or eco-growing communities (Smallbone & Welter, 2001). Amazonia Herbs in Brazil supports indigenous communities. They work closely with indigenous communities along the Amazon, who collect and grow herbs for them. Part of the income is used for community development, helping the local population (FAO, 2019).

The collection, cultivation and processing of medicinal herbs often take place in disadvantaged regions and settlements, as labour, land and processing are cheaper here, among other things. In our country, we can often find local government medicinal herb growing or collecting initiatives launched in the Cserehát, Ormánság and Szécsényi districts in order to catch up (Virág, 2017). Herbária Zrt. provides work in several rural settlements, mainly during the medicinal herb collection period, in summer and early autumn. This is a source of income for disadvantaged, low-educated and mainly uneducated people. For HerbaHáz Kft., the employment of women is extremely important, especially in part-time employment, as this way they have time for their family and children in addition to their work (Pászk, 2024).

3. MATERIALS AND METHODS

3.1. Objective, methodology and results of interview research conducted with small herbalist businesses and village leaders

3.1.1. Research purpose and methodology

As the primary part of our research, we conducted semi-structured professional interviews with 32 medicinal-plant-growing experts and 4 settlement leaders from different parts of the country. The interviewees were selected from small settlements with a population of less than 5,000 people from both groups. The interviews were conducted by telephone between May and June 2025. The semi-structured interviews contained 32 questions for the growers and 18 questions for the settlement leaders. The average interview took 50 minutes to complete.

In this study, we would like to present some of the results of the interviews, exploring the similarities and differences between the responses of herbalist cultivation experts and comparing them with the literature.

In order to make the sector and its contribution to the life of small settlements sufficiently transparent, we considered semi-structured professional interview research to be the most effective of the primary research methods, as it allows us to collect more relevant information than with other methods. With the help of the chosen research method, we were able to obtain useful information, data, and the opinions of herbalists on certain issues, with the help of which the sector can be more transparent and developed.

The results of the interviews were processed as follows: The answers to the individual questions were recorded in an Excel spreadsheet based on our paper-based notes and audio recordings, then we categorized them after content analysis, and finally we coded the answers according to a nominal scale so that they could be used for statistical calculations. The results of the interviews of the herbal growing businesses are presented on this basis.

The results were processed and statistical analyses were performed using Microsoft Excel 365 and IBM SPSS 28.0.1. Due to the small sample size, we were only able to perform specific statistical analyses that are specifically designed for analyzing small sample sizes. For each question, a correlation analysis was performed with other questions, using Kendall's Tau-b correlation calculation, and then significance levels were examined.

In all cases, the interviewees received detailed verbal and written information about the research and gave their consent to the research by completing a consent form. Participation in the research was voluntary and entailed complete anonymity.

Semi-structured professional interviews are a qualitative research method in which researchers study people's experiences, actions and reflections. Qualitative research is a more personal and qualitative research method that provides more information, and also allows for the inclusion of questions that may arise during the research (Jackson et al., 2007). Thanks to semi-structured professional interviews, we were able to learn more about the interviewees' opinions on the questions and their reasons (King, 2004). Semi-structured professional interviews are based on question lists, but they are more flexible and give more space to both the interviewee and the researcher (Jackson et al., 2007). During the qualitative content analysis, we performed a coding process (Cho & Lee, 2014). We used Kendall's Tau-b correlation calculation to calculate the correlation. It is based on ranks, but uses a different mathematical approach. It measures monotonic relationships and can be used well even with small sample sizes (Walker, 2016).

Our results are detailed below.

4. DISCUSSION OF MAIN FINDINGS AND THEIR RELATION TO THE REVIEWED LITERATURE

4.1. Results and their analysis

One of the most important questions of our interview research was the following: **In your opinion, what impact does the presence and operation of your small business have on your settlement?**

The answers to the question were first categorized, then the data were summarized and evaluated (Table 3). As can be seen in the table, most interviewees indicated the increase in tax revenues as the most important impact on the life of their settlement, 78.12% (25 people). This was followed by job creation with 43.75% (14 people), then the promotion of the settlement and tourism at 37.5% (12 people), and finally other impacts (such as bringing grant money to the settlement) 21.87% (7 people). We compared the other impact with the question of what impact the surveyed enterprises have on other enterprises operating in the settlement, there is a medium-strong significant relationship between the two questions ($\tau b = 0.402$, $p = 0.023$). We compared the question of whether it has an impact on job creation with the size of annual sales, based on which we obtained a medium-strong significant relationship ($\tau b = 0.390$, $p = 0.027$).

The fact that the vast majority of respondents identified increased tax revenues as the primary impact is consistent with the literature on the local role of SMEs, which classifies the direct fiscal contribution and economic embeddedness of enterprises among the most easily perceived, "hard" impacts (taxes, turnover, local spending), as opposed to the "soft" community impacts that materialize in the longer term (cohesion, strengthening of the civil sphere). The moderately strong, significant relationship between job creation and sales volume ($\tau b=0.390$; $p=0.027$) can be interpreted in terms of the scale and labor absorption characteristics of SMEs: according to domestic and international examples, more marketable enterprises with increasing sales are more likely to expand their employment (especially in rural and disadvantaged areas), while the smallest units often operate with family labor or seasonally, with limited job creation capacity (Kulcsár et al., 2023; Csurgó et al., 2025). The same logic appears in the summary of SME impact categories: increasing employment and local incomes belongs to the "economic side" of the impact chain and is typically size and market dependent (Table 2; Radácsi 2021). The occurrence of tourism and local promotion (37.5%) resonates well with the examined case studies: several Hungarian examples (e.g. Bükkszentkereszt) and the practice in Lókod (RO) show that herbal businesses are able to generate local traffic, accommodation bookings and retail spending through workshops, garden and factory visits, thereby multiplying their impact on the local economy through tourism (Barabási, 2019; Pászk-Szűcsné Markovics, 2023; 2024b). Short sales channels and community programs – including activities to strengthen health awareness – can be organized into a tourist offer, which explains why some of the respondents also emphasize the promotional effect.

Table 3

The impact of small herbal-medicine-growing businesses on the life of their settlements

EFFECT TYPE	YES (pcs)	NO (pcs)	YES RATE (%)
Tax revenues	25	7	78,12%
Job creation	14	18	43,75%
Town promotion, tourism	12	20	37,5%
Other	7	25	21,87%

Source: own editing

To illustrate the relationship between the different impact types, we created a correlation matrix, which is shown in Table 4. The correlation matrix shows how much the choice of each impact type is associated with the respondents. A higher value means a stronger relationship. The strongest relationship is between job creation and settlement promotion and tourism (0.23), but even this is weak, and the other relationships are negligible.

The weak covariances in the correlation matrix in Table 4 indicate that the examined types of effects do not appear in a "package", but rather company-specific, depending on size, market and network embeddedness; this is consistent with the relevant literature, according to which the "hard" (fiscal, employment) and "soft" (cohesion, civil society, health awareness) effects of SMEs unfold differently in time and intensity (Table 2; Radácsi 2021; Reisinger 2022).

Table 4

Correlation matrix of the relationship between different types of effects

	tax revenues	job creation	town promotion, tourism	other
tax revenues	1,00	0,13	0,09	0,01
job creation	0,03	1,00	0,23	0,09
town promotion, tourism	0,09	0,23	1,00	0,08
other	0,01	0,09	0,08	1,00

Source: own editing

As a next step, we summarized how many types of impacts were indicated by the respondents:
0 impacts: 6 people
1 impact: 17 people
2 impacts: 18 people
3 impacts: 13 people
4 impacts: 2 people responded in total.

Most respondents mentioned 1 or 2 effects, but some mentioned 3 types of effects.

The second of the research questions, which we analyze in this article, was the following question: **On a scale of 1-6, please rate how your herbal medicine growing business affects the economic processes of the settlement? 1: It does not affect at all – 6: It has a strong influencing effect.**

Table 5 shows the occurrences in numbers for each value, as well as basic statistics from the data. The most common values for occurrence were 1 and 3, which were answered by 10 people each, followed by value 4 (5 people), then value 5 (3 people), and finally values 2 and 6, which were chosen by 2 people each. The average (2.84) shows that respondents tend to classify themselves in the lower-middle range for this question, meaning they do not perceive a strong economic influence, but they do not consider their impact to be negligible either. In the case of the median (3.0), half of the respondents gave a value lower than 3 and half gave a value higher than 3, which again shows that the majority of interviewees perceive the impact to be medium or weaker. In the case of the standard deviation (1.57), the value shows a fairly large dispersion, meaning that the opinions of the respondents are quite different. The minimum (1) and maximum (6) show that all possible answers were given by the participants. Most small businesses marked a lower value, which shows that they do not feel that they are a very influential force in the local economy. We examined the question by comparing it with the relationship of the given business with other businesses in the settlement, and we found a moderately significant relationship between them ($\tau b = 0.509$, $p = 0.001$).

The frequency pattern in Table 5 suggests that the majority of respondents perceive a moderate but not negligible economic impact, while the perceived impact is highly heterogeneous. This picture fits well with the distinction summarized in the literature between the "hard" (fiscal, employment) and "soft" (community, health awareness, tourism) impacts of SMEs: the former can be measured more stably, the latter appear more slowly and context-dependently, therefore self-assessments are widely dispersed (Table 2; Radácsi 2021; Reisinger 2022).
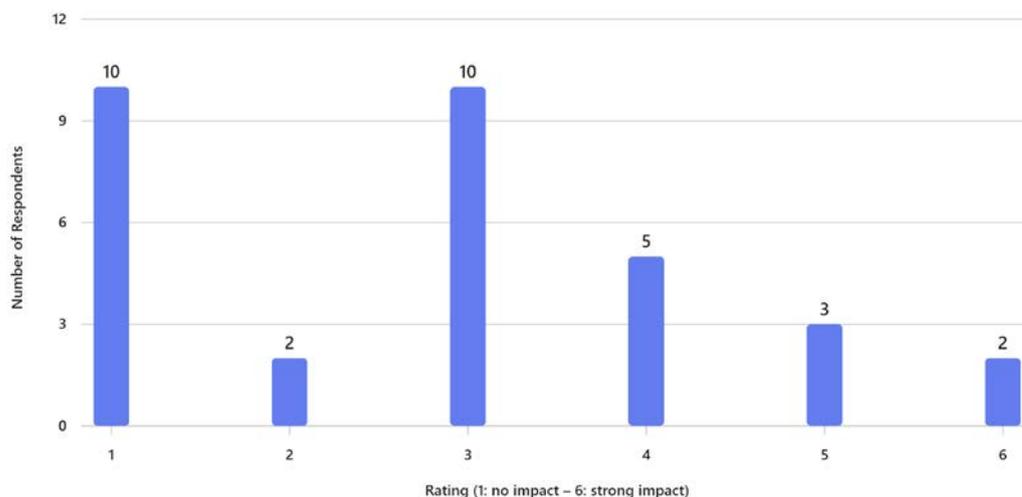
Table 5

Basic statistics

	Occurrences (main)	Average	Median	Spread	Minimum	Maximum
1	10					
2	2					
3	10					
4	5	2,84	3,0	1,57	1	6
5	3					
6	2					

Source: own editing

Figure 1 shows the distribution of the economic impact of herbal medicine growing SMEs (scale 1-6), comparing the number of respondents and their evaluation.

Source: own editing

Figure 1: Distribution of the economic impact of herbal medicine growing SMEs

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The third of the research questions, which we analyze in this article, was the following question: **On a scale of 1-6, please rate the relationship of your herbal medicine growing business with other businesses operating in the settlement. 1: No relationship – 6: There is a very close relationship.**

Table 6 shows the occurrences in number for each value, as well as the basic statistics from the data. The most common value for occurrence was 3, which 14 people chose, followed by 2 (5 people) and 6 (4 people), then 1 (4 people), and finally 4 (3 people) and 5 (2 people). The average (3.19) shows that the relationship system is around the average value, but not too close. In the case of the median (3.0), half of the respondents gave a value less than 3 and half gave a value greater than 3, which again shows that the majority of the interviewees feel the relationship is average or weaker. In the case of the standard deviation (1.47), the value shows quite a large dispersion, meaning that the opinions of the respondents are quite different. The minimum (1) and maximum (6) show that the participants gave all possible answers. Most small businesses indicated a lower value, which shows that they do not feel very connected to other businesses in their locality.

The distribution in Table 6 suggests that the system of relationships between local businesses is typically "functional but not close", i.e. basic cooperations (supply, service purchases) exist, but close network collaborations are rarer; this is reinforced by the high standard deviation (1.47), which indicates heterogeneous embeddedness (there are both relationship-oriented and more isolated actors). The literary background describes the same duality: herbal SMEs are able to increase the turnover of other local businesses through local value chain relationships (mechanical work, packaging, logistics), but "soft" network benefits (joint promotion, tourism packages, community programs) only appear more strongly where they are consciously built on workshops, garden and factory visits, and short sales channels (e.g. Bükkszentkereszt, Lókod case studies). The moderately significant correlation between relationship intensity and other impact choices (τb levels) also supports this picture: where local embeddedness is stronger, economic and promotional impact is perceived as higher, but this is not general across the entire sample.
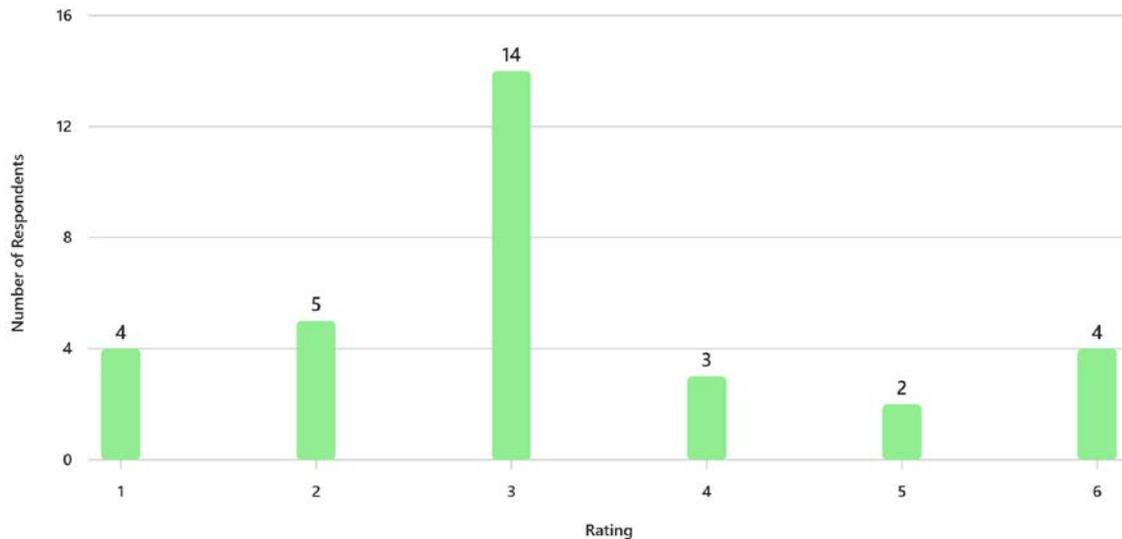
Table 6

Basic statistics

	Occurrences (main)	Average	Median	Spread	Minimum	Maximum
1	4	3,19	3,0	1,47	1	6
2	5					
3	14					
4	3					
5	2					
6	4					

Source: own editing

Figure 2 shows the relationship of herbal medicine growing SMEs with other businesses in their locality (scale 1-6), comparing the number of respondents and their evaluation.

Source: own editing

Figure 2: Relationship of herbal medicine growing SMEs with other businesses in their locality

The fourth of the research questions, which we present in this article, was the following question: **On a scale of 1-6, please rate the relationship your herbalist business has with the people living in the settlement. 1: No relationship – 6: There is a very close relationship.**

Table 7 shows the occurrences in number for each value, as well as the basic statistics from the data. The most common values for occurrence were 2 and 6, answered by 8 people each, followed by 4 (5 people) and 5 (5 people), then 3 and 1, with 3 people each. The average (3.78) shows that the majority of interviewees indicated a medium or closer relationship with the local population. The median is 4.0, the standard deviation is 1.77. The minimum (1) and maximum (6) show that all possible answers were given by the participants, so there are businesses that have no relationship with the local population at all, while there are those where the relationship is very close.

The pattern in Table 7 indicates that the relationship between businesses and the local population is fragmented: on the one hand, many actors only maintain loose, ad hoc relationships, on the other hand, very close, regular interactions are visibly present (e.g. garden and plant visits, workshops, health awareness programs). The domestic and international examples presented in the literature support the same duality: where herbal activity is organized into a tourist and community offering, the relationship becomes more intense and results in close embeddedness; where conscious community and market opening is lacking, interactions remain at a low intensity (e.g. Radácsi 2021; Reisinger 2022; Pászk-Szűcsné Markovics 2023, 2024b; Barabási 2019).
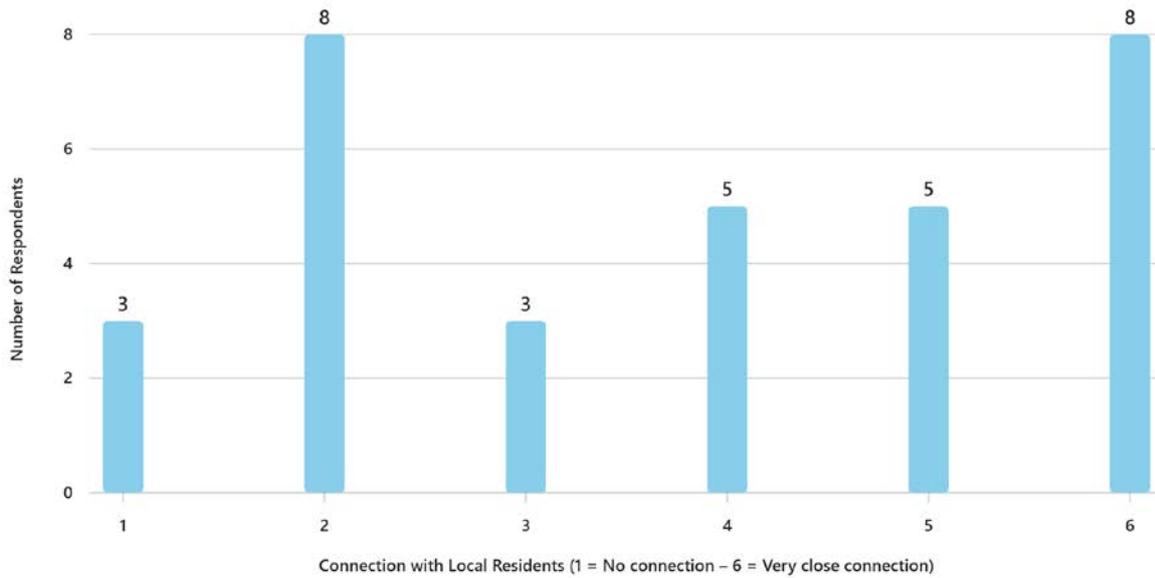
Table 7

Basic statistics

	Occurrences (main)	Average	Medián	Spread	Minimum	Maximum
1	3	3,78	4,0	1,77	1	6
2	8					
3	3					
4	5					
5	5					
6	8					

Source: own editing

Figure 3 shows the relationship of herbal medicine growing SMEs with the people living in their locality (scale 1-6), comparing the number of respondents and their evaluation.

Source: own editing

Figure 3: Relationship of herbal medicine growing SMEs with residents of their settlements

The next question we present was: **On a scale of 1–6, rate how your herbal medicine business affects the following factors in your municipality (1: does not affect at all- 6: has a very strong impact). The interviewees had to rate 18 factors.**

Table 8 shows the basic statistics calculated from the responses. In terms of mean and median, the highest averages were for the factors creating a healthier environment (3.97), forming a more health-conscious attitude (4.55) and strengthening an ecological attitude (4.06). So, the respondents mostly have a significant positive impact in the environmental and health-conscious areas. The lowest averages were for the factors reducing poverty (1.52), strengthening the civil sector, and promoting volunteering (1.87-1.87), so according to the businesses, these factors have less impact.

In the case of standard deviation, higher values indicate different opinions. For example, factors such as creating a healthier environment (1.76), forming a more health-conscious attitude (1.77), and improving individual skills (1.64) have high values, so some people rated them very positively, while others rated them less positively. Low standard deviation indicates relatively uniform opinions. For example, the factor reducing poverty was one such factor, where almost all interviewees gave a low value (0.96).

In the case of minimum and maximum, the full scale occurs for all factors, however, for most, 1 and 2 are in the majority, except for the environmental and health-conscious factors.

In terms of occurrences, high ratings (5-6) occurred mainly for environmental, health-conscious and ecological factors. Lower ratings (1-2) occurred mostly for social, economic and educational factors.

The results of Table 8 are coherent with the literature background: the environmental and health-conscious dimensions (healthier environment, more health-conscious attitude, ecological attitude) receive the highest averages, which is consistent with the synthesis that the strongest, short-term perceptible "soft" effects of herbal SMEs appear in the areas of environmental quality, ecological attitude and health behavior – partly through awareness-raising activities related to organic production, local programs (garden and factory visits, workshops) and short sales channels (see Table 2). In contrast, the low averages of poverty reduction, strengthening the civil sphere and volunteering indicate that these longer-term, institution- and network-dependent effects materialize less frequently and more unevenly in the sample. Higher standard deviations (e.g. healthier environment, health-conscious attitude, individual skills) indicate company-specific implementation methods and different degrees of local embeddedness, while the low standard deviation for poverty reduction reflects a uniformly weak perceived contribution. The pattern of minimum–maximum covering the entire scale confirms that there is a large variance even within the same impact category: where conscious value chain relationships, tourism and community development activities are built, high (5–6) ratings appear for environmental/health-oriented factors; where these are absent, socio-economic and educational factors tend to receive low (1–2) values.
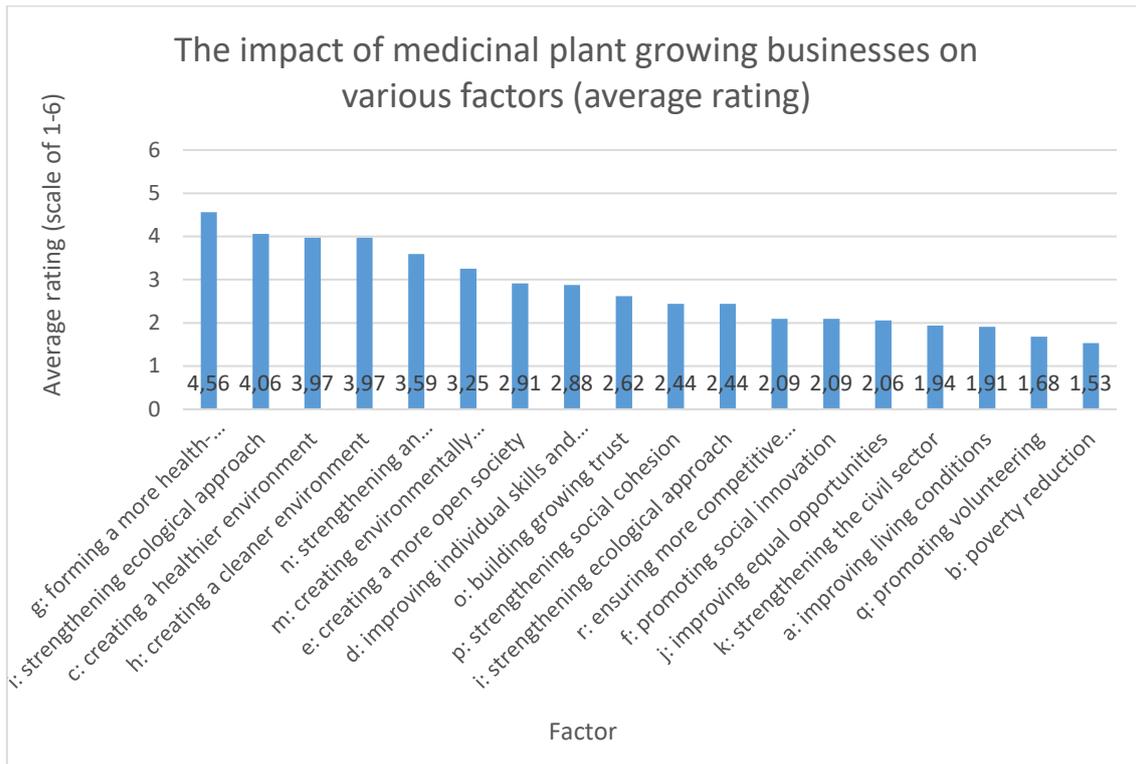
Table 8

Basic statistics

Factor	Average	Medián	Spread	Minimum	Maximum	1	2	3	4	5	6
a: improving living conditions	1,9	1	1,33	1	6	17	7	3	2	1	1
b: poverty reduction	1,52	1	0,96	1	4	23	2	4	2	0	0
c: creating a healthier environment	3,97	4	1,76	1	6	5	1	6	5	6	8
d: improving individual skills and competencies	2,81	2	1,64	1	6	9	8	2	5	6	1
e: creating a more open society	2,84	2	1,7	1	6	8	8	6	3	2	4
f: promoting social innovation	2,03	2	1,45	1	6	15	10	1	1	3	1
g: forming a more health-conscious attitude	4,55	5	1,77	1	6	3	2	4	3	4	15
h: creating a cleaner environment	3,9	4	1,49	1	6	4	1	5	8	10	3
i: strengthening ecological approach	4,06	4	1,48	1	6	3	2	4	7	11	4
j: improving equal opportunities	1,97	1	1,58	1	6	20	3	2	3	1	2
k: strengthening the civil sector	1,87	1	1,57	1	6	21	4	1	0	4	1
l: preserving and strengthening local culture	2,45	2	1,69	1	6	14	5	3	4	3	2
m: creating environmentally friendly working conditions	3,29	3	1,55	1	6	6	0	16	0	6	3
n: strengthening an environmentally friendly approach	3,55	3	1,69	1	6	6	1	10	2	8	4
o: building growing trust	2,55	2	1,61	1	6	11	7	5	3	3	2
p: strengthening social cohesion	2,39	2	1,73	1	6	14	6	5	0	3	3
q: promoting volunteering	1,87	1	1,52	1	6	21	3	2	1	3	1
r: ensuring more competitive education	2	1	1,67	1	6	20	3	3	1	1	3

Source: own editing

Figure 4 also shows the results in a diagram, in relation to the various factors and the evaluations received for them.

The impact of medicinal plant growing businesses on various factors (average rating)

Source: own editing

Figure 4: The impact of herbal medicine growing SMEs on the various factors examined

Table 9 shows the proportion of very high and very low ratings by factor. In some cases, the proportions are quite illustrative. For example, in the case of the factor of forming a more health-conscious attitude, the proportion was 62% high and only 16% low. In the case of reducing poverty, the proportion was 0% high and 81% low. The situation is similar in the case of the factor of improving living conditions, where the proportion was 6% high, while 78% low.

The extreme value ratios in Table 9 clearly outline the asymmetry between the "soft" environmental-health behavior and "hard" social impacts of herbal SMEs: while the predominance of high ratings for the factor of developing a more health-conscious attitude (62% vs. 16%) indicates that awareness-raising activities related to organic production, garden and factory visits, workshops and short sales channels generate a quickly noticeable positive impact, poverty reduction (0% high, 81% low) and improvement of living conditions (6% high, 78% low) are longer-term, institution- and network-dependent dimensions that require stable, broad-based collaborations and resources — in their absence, the perceived contribution remains low. The literature background — by separating the economic/fiscal and community/ecological components of corporate impacts, and by using examples such as Bükkszentkereszt and Lókod — describes exactly this pattern: environmental and health-oriented results materialize more quickly, while poverty reduction, strengthening the civil sphere and volunteerism can only materialize in a meaningful way on long-term, networked development paths.

Table 9

Proportion of evaluations by factor

Factor	Very high (5-6) ratio	Very low (1-2) rate
a: improving living conditions	0,06	0,78
b: poverty reduction	0	0,81
c: creating a healthier environment	0,44	0,19
d: improving individual skills and competencies	0,25	0,53
e: creating a more open society	0,22	0,5
f: promoting social innovation	0,12	0,78
g: forming a more health-conscious attitude	0,62	0,16
h: creating a cleaner environment	0,44	0,16

i: strengthening ecological approach	0,47	0,16
j: improving equal opportunities	0,12	0,72
k: strengthening the civil sector	0,16	0,78
l: preserving and strengthening local culture	0,16	0,62
m: creating environmentally friendly working conditions	0,28	0,22
n: strengthening an environmentally friendly approach	0,41	0,22
o: building growing trust	0,19	0,56
p: strengthening social cohesion	0,19	0,62
q: promoting volunteering	0,12	0,78
r: ensuring more competitive education	0,16	0,72

Source: own editing

We also calculated correlations from the results, which showed a significant relationship for certain factors. The highlighted, strongest (strong, $|r| \geq 0.6$) correlations are the following:

- Creating a healthier environment $\leftrightarrow$ Forming a more health-conscious attitude: 0.84
- Creating a healthier environment $\leftrightarrow$ Creating a cleaner environment: 0.78
- Creating a more health-conscious attitude $\leftrightarrow$ Strengthening an ecological attitude: 0.86
- Creating a cleaner environment $\leftrightarrow$ Strengthening an ecological attitude: 0.88
- Creating environmentally friendly working conditions $\leftrightarrow$ Strengthening an environmentally friendly attitude: 0.85
- Strengthening the civil sector $\leftrightarrow$ Promoting volunteerism: 0.93
- Creating growing trust $\leftrightarrow$ Strengthening social cohesion: 0.87
- Promoting social innovation $\leftrightarrow$ Improving equal opportunities: 0.83
- Improving individual skills and competencies $\leftrightarrow$ A more open society design: 0.81

The pattern of the strongest correlations clearly outlines two or three "effect blocks": in the environmental–health behavior cluster, "healthier environment $\leftrightarrow$ more health-conscious attitude" (r=0.84), "healthier $\leftrightarrow$ cleaner environment" (0.78), "healthier attitude $\leftrightarrow$ strengthening ecological attitude" (0.86), and "cleaner environment $\leftrightarrow$ strengthening ecological attitude" (0.88), as well as "environmentally friendly working conditions $\leftrightarrow$ environmentally friendly attitude" (0.85) move in the same direction, which indicates that environmental and health-oriented interventions are strengthened together and are worth treating as a package. In the community participation dimension, "strengthening the civil sector $\leftrightarrow$ encouraging volunteerism" (0.93) is in almost complete overlap, which suggests that the development of volunteerism and civil capacity building are direct complements. On the axis of social cohesion, the strong correlation of "increasing trust $\leftrightarrow$ social cohesion" (0.87) points to the key role of local trust-building mechanisms (events, community learning). The relationship between social innovation and opportunity creation (0.83) and (v) "skill and competence development $\leftrightarrow$ more open social planning" (0.81) suggests that the expansion of individual capacities and inclusive planning practices are moving on a mutually reinforcing path. Overall, these high correlations indicate that the effects do not appear in isolation, but in thematic packages; accordingly, the local development toolbox should be designed and evaluated along cluster logic (e.g. environmental–health block; civil–volunteering block; skills and openness block).

5. CONCLUSION AND SUMMARY

The integrated analysis of the literature and the interview-based empirical research reveals that the social and economic role of small medicinal herb–growing enterprises is more complex and more sector-specific than what in the Hungarian publications. While the international literature consistently highlights the multifunctional contribution of small agricultural enterprises—ranging from rural job creation to community embeddedness, local knowledge transfer and landscape management—our results show that the medicinal herb sector embodies these functions in an uneven and highly selective way.

First, the interviews confirmed a central insight also found in the literature on rural SMEs: enterprises tend to perceive their most immediate and measurable local contribution in fiscal rather than social terms, with tax-revenue generation ranked as their primary impact. This pattern is consistent with wider European SME studies, which describe how micro-enterprises often identify themselves more as economic actors embedded in local markets than as community

institutions. The fact that tax contribution clearly overshadowed job creation in the respondents' perceptions suggests that these firms operate with limited labour absorption capacity and often rely on family labour or seasonal informal labour. This helps explain why only some of enterprises reported local job creation.

The moderate but statistically significant associations between the impact variables (e.g. between job creation and the promotion of tourism; or between perceived economic role and annual revenues) indicate that medicinal herb–growing SMEs form a heterogeneous group whose influence on local socio-economic processes depends strongly on their size, structure and market integration. Contrary to assumptions that small agricultural firms naturally serve as basic of local development, the interviews show that many herb-growing businesses maintain weak or only transactional relationships with other local enterprises. This partially contradicts the literature that emphasises horizontal cooperation and clustering in agricultural value chains. The discrepancy suggests structural constraints: geographical isolation, limited production capacity, and the absence of coordinated local supply-chain development all appear to limit the formation of dense local business networks.

The relationship between the enterprises and the local population revealed a dual pattern. While several businesses maintain close, trust-based ties with residents, others report almost no interaction. This divergence aligns with international findings on multifunctional agriculture, which show that firms with stronger community embeddedness often diversify into agritourism, direct sales or educational activities, whereas those producing mainly for wholesale or contract markets tend to remain socially "invisible." This has important implications: without deliberate community-oriented activities, even environmentally valuable production such as medicinal herb cultivation does not automatically translate into broader rural social development.

The analysis of the 18 settlement-level impact factors provides further conceptual clarity. The consistently high scores given to environmental and health-related impacts—such as fostering a healthier environment, promoting health-conscious behaviour, and strengthening ecological attitudes—suggest that herb-growing enterprises understand their mission primarily in cultural and environmental terms, rather than in terms of socio-economic transformation. This orientation reflects the intrinsic characteristics of the sector: medicinal herb cultivation carries strong symbolic and practical connections to tradition, naturalness and well-being, which aligns with global trends in sustainable and alternative agriculture. By contrast, the low scores associated with poverty reduction, civil-sector strengthening or improving living conditions highlight that these enterprises do not perceive themselves as agents of structural social change, nor do they possess the capacities typically required for such roles.

We can conclude that small medicinal herb–growing enterprises contribute meaningfully—but unevenly—to local development. Their strongest impacts emerge in areas linked to environmental awareness, ecological culture and health-related attitudes, while their weakest contributions appear in domains demanding long-term institutional engagement or substantial financial resources. These results nuance the assumptions often found in rural-development policy, where such enterprises are portrayed as uniformly beneficial across multiple dimensions. The evidence instead points to a sector with high soft-impact potential but limited hard-impact capacity.

This distinction has strategic relevance. If local governments or development agencies aim to leverage the strengths of herbal enterprises, the most promising areas lie in health education, ecological awareness programmes, local identity building and tourism-related initiatives. Conversely, expecting these SMEs to deliver substantial poverty reduction, employment expansion or community-institution building is unlikely to succeed without external support, coordinated programmes or integration into larger regional value chains.

Overall, the study demonstrates that medicinal herb–growing enterprises represent a valuable but underutilised asset in small settlements. Their contributions could be amplified through targeted development plans—such as networking initiatives, cooperative models, or community-facing educational programmes—which would allow them not only to strengthen their market position but also to convert their environmental and cultural influence into broader socio-economic benefits.

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Author's contribution

Pászk Norbert: Conceptualization 90%, Formal analysis 90%, Funding acquisition 90%, Supervision 90%, Validation 90%, Writing – original draft 90%, Writing – review & editing 90%, overall: 90%.

Szűcsné Dr. Markovics Klára: Conceptualization 10%, Formal analysis 10%, Funding acquisition 10%, Supervision 10%, Validation 10%, Writing – original draft 10%, Writing – review & editing 10%, overall: 10%.

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REFERENCES

Barabási, T. (2019). Gyógynövény gyűjtés és -feldolgozás, mint hátrányos helyzetű fiatalok kapaszkodója (Medicinal plant collection and processing as a support for disadvantaged young people). In Márkus E., & Máté-Szabó B. (Szerk.), *Tanulás felnőttkorban, Az élethosszig tartó tanulás esetei a hazai és nemzetközi gyakorlatban* (pp. 84–88). Debrecen: Nullpont Kulturális Egyesület. https://mek.oszk.hu/19700/19716/19716.pdf#page=84

Benedek, Zs., Fertő, I., & Szente, V. (2020). The multiplier effects of food relocalization: A systematic review. *Sustainability, 12*(9), 3524. https://doi.org/10.3390/su12093524

Bernáth, J., Czirbus, Z., Zámboriné Németh, É. (2014). Gyógynövények gyűjtése és termesztése – képzési segédlet (Collection and cultivation of medicinal plants – training aid). Gyógynövény Szövetség és Terméktanács.

Bodeker, G. (2007). Medicinal plant biodiversity and local healthcare: Rural development and the potential to combat priority diseases. In B. Havercort, & S. Rist (Eds.), *Endogenous development and bio-cultural diversity: the interplay of worldviews, globalization and locality* (pp. 241–255). Leusden: COMPAS Press. Retrieved January 10, 2024 from https://www.researchgate.net/publication/254062923_Medicinal_plant_biodiversity_and_local_healthcare_Rural_development_and_the_potential_to_combat_priority_diseases

Cho, J. Y., & Lee, E-H. (2014). Reducing confusion about grounded theory and qualitative content analysis: Similarities and differences. *The Qualitative Report, 19*(32), 1–20. https://doi.org/10.46743/2160-3715/2014.1028

Csurgó, B., Kiss, M., & Tomay, K. (2025). A vidéki vállalkozók szerepe a helyi hagyomány és a térségimázs formálásban (The role of rural entrepreneurs in shaping local tradition and regional image). *Socio.hu Társadalomtudományi Szemle, 15*(2), 94–114. https://doi.org/10.18030/socio.hu.2025.2.94

Cunningham, A. B. (1993). African medicinal plants: setting priorities at the interface between conservation and primary healthcare. *People and Plants Initiative Working Paper, 1*, UNESCO, Nairobi. Retrieved March 20, 2024 from https://unesdoc.unesco.org/ark:/48223/pf0000096707

Dalir, M., Choobchian, S., Abbasi, E., Fauconnier, M-L., Dogot, T., Varnik, R., & Azadi, H. (2025). Impact of medicinal plants cultivation on rural livelihoods: the case of South Khorasan Province in Iran. *Environment, Development and Sustainability, 27*, 30945–30971. https://doi.org/10.1007/s10668-024-04947-1

Erdész F. -Kozak, A. (2008). A gyógynövényágazat helyzete (The situation of the herbal medicine sector). *Agrárgazdasági Tanulmányok, 2008(*4). Retrieved March 20, 2024 from http://repo.aki.gov.hu/1438/1/at_2008_04.pdf

FAO (2019). *The State of the World's Biodiversity for Food and Agriculture.* FAO Commission on Genetic Resources for Food and Agriculture Assessments. Rome. Retrieved September 23, 2025 from https://openknowledge.fao.org/server/api/core/bitstreams/50b79369-9249-4486-ac07-9098d07df60a/content http://www.fao.org/3/CA3129EN/CA3129EN.pdf

Farnsworth, N. R., & Soejarto, D. D. (1991). Global importance of medicinal plants. In O. Akerele, V. Heywood, & H. Synge (Eds.), *Conservation of medicinal plants* (pp. 25–52). Cambridge: Cambridge University Press. https://doi.org/10.1017/cbo9780511753312.005 Retrieved February 10, 2024 from https://www.cambridge.org/core/books/abs/conservation-of-medicinal-plants/global-importance-of-medicinal-plants/897F3C64E1A094859A550FC17F1566A9

FRLHT (2002). *Medicinal plants scenario in India.* Unpublished report of the Foundation for Revitalization of Local Health Traditions (FRLHT), Bangalore. Retrieved January 10, 2024 from https://www.frlht.org/

Jackson, R., Drummond, D., & Sakile, C. (2007). What is qualitative research? *Qualitative Research Reports in Communication, 8*(1), 21–28. https://doi.org/10.1080/17459430701617879

King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell, & G. Symon (Eds.), *Using templates in the thematic analysis of text* (pp. 256–270). SAGE Publications. https://doi.org/10.4135/9781446280119.n21

Kulcsár, N., Illés, Z., Temesi, N., Szendrő, E., & Szendrő, P. (2023). Sustainable approach for the collection and processing of medicinal and aromatic plants in Hungary. *Progress in Agricultural Engineering Sciences, 19*(1), 83–112. https://doi.org/10.1556/446.2023.00097

Marshall, E. (2011). Health and wealth from medicinal aromatic plants. Food and Agriculture Organisation. *Livelihood Diversification Booklet, No 17.* Retrieved January 20, 2024 from https://www.researchgate.net/publication/272786124_Health_and_Wealth_from_Medicinal_Aromatic_Plants_Food_and_Agriculture_Organisation_Livelihood_Diversification_Booklet_No_17_2011

Mofokeng, M. M., du Plooy, C. P., Araya, H. T., Amoo, S. O., Mokgehle, S. N., Pofu, K. M., & Mashela, P. W. (2022). Medicinal plant cultivation for sustainable use and commercialisation of high-value crops. *South African Journal of Science, 118*(7-8), 1–7. https://doi.org/10.17159/sajs.2022/12190

Molnár, J., Szalai, S. M., Bacho, R., Moreno-García, E., Dávid, L. D., & Korenika, A. (2025). Tradition as economic value: The role of medicinal herbs in emerging green health markets. *Journal of Cultural Analysis and Social Change, 10*(4), 2508–2517. https://doi.org/10.64753/jcasc.v10i4.3286

Pergola, M., De Falco, E., Belliggiano, A., & Ievoli, C. (2024). The most relevant socio-economic aspects of medicinal and aromatic plants through: A literature review. *Agriculture, 14*(3), 405. https://doi.org/10.3390/agriculture14030405

Pászk, N. (2024). KKV-k megjelenése és szerepe a gyógynövénytermesztő ágazatban (The emergence and role of SMEs in the herbal medicine sector). *Hantos Periodika, 5*(1), 176–186.

Pászk, N., & Szűcsné Markovics, K. (2023). Gyógynövénytermesztés és annak hazai jellemzői (Medicinal plant production and its domestic characteristics) In: Musinszki, Z., & Szűcsné Markovics, K. (Szerk.), *Gazdálkodási kihívások 2023-ban* (pp. 117–123). Miskolc: MTA MAB Gazdálkodástudományi Munkabizottság.

Pászk, N., & Szűcsné Markovics, K. (2024a). A fűszer- és gyógynövénytermesztő szektor vállalkozásdemográfiai trendjei 2008–2022 között. In Musinszki, Z., Horváth, Á., & Szűcsné Markovics, K. (Szerk.), *Gazdálkodási kihívások 2024-ben* (pp. 196–212). Miskolc: MTA MAB Gazdálkodástudományi Munkabizottság.

Pászk, N., & Szűcsné Markovics, K. (2024b). A gyógynövénytermesztő szektor stakeholder elemzése. In: Sipos, Zs. & Pászk, N. (Szerk.), *Tanulmánykötet: I. Miskolci Gyógynövény Konferencia* (pp. 81–89). Miskolc: Budai Nyomdaipari Kereskedelmi és Szolgáltató Kft.

Radácsi, L. (2021). *Felelős és fenntartható vállalat.* Budapest: Saldo.

Reisinger, A. (2022). A vállalatok és a társadalom lehetséges kapcsolódási pontjai – elméleti megközelítésben. *Civil Szemle, 19*(1), 5–23.

Salamon, I. (2014). Aromatic and medicinal herbs of Slovakia. *Medicinal Plants - International Journal of Phytomedicines and Related Industries, 6*(3), 155–160. https://doi.org/10.5958/0975-6892.2014.00001.x

Schippmann, U., Leaman, D., & Cunningham, A. (2002). Impact of cultivation and gathering of medicinal plants on biodiversity: global trends and issues. In *Biodiversity and the ecosystem approach in agriculture, forestry and fisheries* (Case study No. 7). Rome: FAO. https://www.fao.org/4/aa010e/AA010E00.pdf

Siemieniako, D., Kubacki, K., & Mitrega, M. (2021). Inter-organisational relationships for social impact: A systematic literature review. *Journal of Business Research, 132*, 453–469. https://doi.org/10.1016/j.jbusres.2021.04.026

Singh, K. N. (2025). Medicinal plants as catalysts for social change: economic, cultural, and policy perspectives. *International Journal of Exploring Emerging Trends in Engineering, 12*(2), 1–8.

Smallbone, D., & Welter, F. (2001). The distinctiveness of entrepreneurship in transition economies. *Small Business Economics, 16*, 249–262. https://doi.org/10.1023/A:1011159216578

Sokszínű Vidék (2017). Hatalmas üzlet a gyógynövény (Herbal medicine is a big business). *Sokszínű Vidék.* Retrieved March 14, 2026 from https://sokszinuvidek.24.hu/viragzo-videkunk/2017/03/13/hatalmas-uzlet-a-gyogynoveny/

Szente, V., Fertő, I., & Benedek, Zs. (2021). Hozzájárul-e a helyi élelmiszerek vásárlása a helyi gazdaság fejlődéséhez? *Tér és Társadalom, 35*(2), 49–68. https://doi.org/10.17649/TET.35.2.3321

Variskhanov, A., Arreeras, T., Taechateerawat, W., Rabten, W., Achyar, D. H., & Sittivangkul, K. (2024). Thai herbal supply chain connectivity: analyzing its visibility via process capability. *Journal of Reproducible Research, 2*(2), 94–103.

Vasile, D., Enescu, C. M., & Dinca, L. (2018). Which are the main medicinal plants that could be harvested from Eastern Romania? *Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, 18*(1), 523–528.

Virág, K. (2017). *A foglalkoztatás és a munkanélküliség elleni küzdelem új formái a hátrányos helyzetű térségekben.* Miskolc: Miskolci Egyetem Állam- és Jogtudományi Kar.

Wairimu, M. G. (2025). The economic impact of medicinal plants on health systems in developing countries. *Newport International Journal of Public Health and Pharmacy (NIJPP), 6*(2), 50–56. https://doi.org/10.59298/NIJPP/2025/625056

Walker, D. A. (2016). Confidence intervals for Kendall's Tau with small samples (SPSS). *Journal of Modern Applied Statistical Methods, 15*(1), 868–883. https://doi.org/10.22237/jmasm/1462077840

Williams, V. L. (1996). The Witwatersrand muti trade. *Veld & Flora, 82*, 12–14.

Witkittiluck, W., & Kortana, T. (2021). The success factors of innovative marketing management for SME/startup entrepreneurs of Thailand herbs. *International Journal of Health Sciences, 6*(S4), 1484–1498. https://doi.org/10.53730/ijhs.v6nS4.6234

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