



Financuar nga
Bashkimi Evropian



MARKET RESEARCH IN THE FIELD OF
COLLECTION AND PROCESSING
OF **FOREST FRUITS** AND
MEDICINAL PLANTS

www.fb.com/swei.alks

Market Research Report in the Field of Collection and Processing of Forest Fruits and Medicinal Plants

Consultants engaged in the survey: Linda Abazi - Morina and Bukurosh Onuzi

January 2019



This project is funded by the European Union

This report is drafted with the support of the European Union-funded “Skilled Workforce for Economic Integration - SWEI” project, implemented by the EPAK - Employment Promotion Agency of Kosovo and ISI - Institute for International Studies in Albania.

The content of this publication can in no way be considered to reflect the positions of the European Union.

CONTENT

Content	3
1. List of acronyms	5
2. Executive Summary	6
3. Introduction	8
4. Ibania	10
4.1 Potential of Medicinal Plants	10
4.2 Lezha Region.....	11
4.3 Kukes Region.....	12
4.4 Findings from the field: Challenges and needs for the development of the activity... 14	
4.4.1. Identification of enterprises that deal with forest fruits and Medicinal Plants... 15	
4.4.2 Depopulation, quality of products.....	16
4.4.3 Lack of trainings.....	16
4.4.5 Unfair competition in the market	17
4.5 Other identified challenges	17
4.6 Employers' needs to reduce gap between demand and supply.	18
4.7 Collection, processing and marketing of forest fruits.....	19
4.8 Local chestnut collectors and street traders.....	19
4.9 Chestnut collectors and processors.....	19
4.9.1 Unmarketed produce	20
4.9.2. Barriers and difficulties to the value chains.....	20
4.9.3 Main obstacles and difficulties in processing aspects.....	21
4.9.4 Performance of medicinal plant businesses over the last years.....	22
5. Kosovo	23
5.1 Municipal profiles.....	24
5.1.1 Municipality of Prizren.....	24
5.1.2 Municipality of Dragash	24
5.1.3 Municipality of Mamusha	24
5.1.4 Municipality of Suhareka.....	25
5.1.5 Municipality of Rahovec.....	25
5.1.6 Municipality of Malisheva.....	25
5.2 Findings of the survey	25
5.2.1 Development potential of this sector	28
5.2.2 Employment in the MPs and FFs collection and processing sector	29

5.3 Challenges and needs in business development	29
5.3.1 Business development conditions	29
5.3.2 Human resources.....	29
5.3.3 Sites and equipment for keeping and storing products	30
5.3.4 Quality of harvested produce.....	30
5.3.5 Networking and creating new business connections	30
5.3.6 Lack of market-related information - export	31
5.3.7 Low presence in the local market.....	31
5.3.8 Awareness of the population on the importance of forests as a source of income ..	31
6. Conclusions and recommendations (common for the two countries).....	33
7. References	35
8. Appendix A - Businesses in Albania	37
9. Appendix B - Businesses in Kosovo	40
10. Appendix C - Methodology	43
11. Appendix D - Questionnaire	44

1. LIST OF ACRONYMS

EPAK	Employment Promotion Agency of Kosovo
RAPA	Regional Administration of Protected Areas
KAS	Kosovo Agency of Statistics
EU	European Union
MP	Medicinal Plants
DLDP	Decentralization and Local Development Program
RAD	Regional Agriculture Directorate
FF	Forest Fruit
INSTAT	Albanian Institute of Statistics
ISI	Institute for International Studies
SNV	Dutch Development Organization
UNDP	United Nations Development Program

2. EXECUTIVE SUMMARY

The scope of this survey is to identify employers in the forest fruits and medicinal plants sector in the Albania-Kosovo border area, the needs of such employers and the field's development potential. This survey will provide a good baseline assessment to be employed by different institutions and organizations in Albania and Kosovo for programming the support for this sector in the future.

The survey is part of the SWEI Project - "Skilled Workforce for Economic Integration" - funded by the European Union, and implemented by the EPAK - Employment Support Agency of Kosovo and ISI - Institute for International Studies in Albania.

The SWEI project is designed to promote cooperation, exchange of experiences, improve the efficiency and quality of Employment Services and Vocational Training Centers towards Sustainable Employment of Jobseekers and Youth Training to Support Socio-Economic Integration in the Albania-Kosovo Cross-Border Region.

The data from the survey reveal that the cross-border region between Kosovo and Albania is a region with high growth potential for forest fruits and medicinal plants. The report also demonstrates that there is a relatively large number of businesses in this activity, and an even larger number of small collection points.

The main findings of the report related to the challenges and needs of such businesses are:

- **Doing Business Conditions:** high interest rates of commercial banks, lack of institutional support at different business development stages, lack of capacities to apply for different development grants;
- **Lack of equipment:** In general, there is a lack of storage, drying or packaging equipment. This is especially relevant for the Lezha and Kukes (Albania) regions, although it has also been presented as a challenge by Kosovo businesses (part of this survey);
- **Lack of warehouses:** Businesses lack warehouses/sites where they can store products for a certain time up to their sale or/and export;
- **Networking:** Creation of new business relations, including businesses with similar activities in the region, ensuring a sustainable market for product sales;
- **Marketing:** There is a lack of business capacity to promote products and in particular the added quality of organic products;
- **Training/capacity building:** Collectors need to be trained on the time and manner of collection of the products, and their proper storage; businesses also need trained staff for the processing of FFs and MPs, professional staff as managers, accountants and other professionals who would assist in all aspects and stages of business development;

- **Raising public awareness:** In general, there is a lack of interest among residents, especially young people, to work in this sector. This is most relevant when it comes to Kosovo. Whereas, in the case of Albania, the challenge is represented by the depopulation and immigration of young people;
- **Unfair competition in the market:** There are constant price movements of products on the market and this discourages harvesters and especially farmers who cultivate such produce.

3. INTRODUCTION

This survey was conducted during the October - November 2018 period. In-depth, semi-structured interviews have been conducted with the main employers of the municipalities defined in the project, which in the case of Kosovo are the municipalities of Prizren, Dragash, Rahovec, Suhareka, Malisheva and Mamusha, while in Albania they have been conducted in the Lezha and Kukes districts.

The main objectives of the survey presented in this report were to:

- a)** Identify enterprises, employers or collection points that deal with Forest Fruits and Medicinal Plants in the Albania-Kosovo border area, which includes the Kukes and Lezha regions in Albania, and in Kosovo the municipalities of: Prizren, Dragash, Rahovec, Suhareka, Malisheva and Mamusha.
- b)** Identify the needs of employers in the field of collection, cultivation and processing of FFs and MPs to reduce the gap between market Demand and Offer.
- c)** Assess the development potential in the field of collection, cultivation and processing of FFs and MPs in the border region between Albania and Kosovo.

The process of business identification has been inclusive. Initially, contacts were established with the relevant municipalities, forestry agencies and forestry departments within these institutions. Since in most cases municipalities do not have a list of businesses engaged in medicinal plants and forest fruits activities, the identification of a business has usually led to the identification of other businesses. From the selected list of municipalities for this survey, only in the Municipality of Mamusha (Kosovo) and the Municipality of Has (Albania) were not identified any business engaged in this activity. This conclusion was reached after discussion with municipal officials and other businesses of the Prizren and Kukes region.

In total, 27 businesses were interviewed; 18 in the Kukes and Lezha regions, and 9 in Kosovo.

For the purpose of this survey, only business representatives (employers) registered in the designated municipalities have been selected. The information about collectors is obtained from businesses with whom they have cooperation contracts. It is worth noting that not all collectors have contracts with businesses, and this is confirmed by the interviewed businesses.

Harvesters are residents/families of rural areas, mainly in proximity to forest areas with the potential to yield forest fruits and medicinal herbs. Depending on demand and prices, harvesters collect different products during the day and evening, and within a short period of time they sell the produce to collection points, or even businesses engaged in direct processing. In most cases, businesses transport the produce from collection points to main warehouses.

Most of the collected produce is sold during the day, and in very few cases the harvesters dry or clean the produce they collect. This is because of the lack of equipment to do so.

4. ALBANIA

Albania, thanks to its geographical position and favorable physical and geographic conditions, is ranked among the first European countries in terms of the wealth of its flora. In Albania grow about 47% of Balkan plant species and 30% of European plant species. Albania's flora includes about 3,250 different plant species belonging to 165 families and 910 genera. About 1.1%, or 28 species and 150 subspecies, are endemic.¹ About 300 species are medicinal and aromatic plants, and rare species, species at risk of extinction and relict species account for about 10% of Albania's flora.²

Albania's flora constitutes a significant potential of biodiversity with ecological and economic values. The medicinal and aromatic plants that grow in Albania have a considerable potential, and 90% of them grow under natural conditions. Usually, aromatic and medicinal plants are harvested by families living in rural areas. Members of these families harvest wild plants, which are later transferred to the collection points of about 30-40 local companies.

4.1 Potential of Medicinal Plants

Over the past 10 years, as a result of increased demand for Albanian produce in international markets, the sector has grown both in terms of quantity of exported produce and in their quality. Albanian companies, suppliers of such produce in international markets, have strengthened their positions in these markets, have gained experience and have established strong networks. An important weight in the contingent of medicinal herbs and forest fruits is occupied by the regions of Kukes and Lezha. In the Lezha region are based the two largest companies in the country that collect and market medicinal herbs.

The most popular forest fruits in the Kukes and Lezha regions are chestnuts, wild pomegranates, blueberries, blackberries, raspberries and strawberries. Tropoja has an area of 2000 hectares of chestnuts and Kukes has an area of 700 hectares, making it the largest massif in the Balkans, with annual production of about 4 thousand tons.

Blueberries are fresh when harvested, but are predominantly marketed as dried. It is estimated that only Kukes and Tropoja produce about 80 tons of blueberries. The main problem related to this product is the preservation of blueberries in refrigerated rooms. Due to the lack of refrigerated rooms, blueberries are collected by the farmers and dried in natural conditions by them, and then are sent to the collectors.

From about 2,300 to 2,400 tons of chestnuts harvested annually in the Tropoja district, only about 75% is destined for the market, while the rest is either used for consumption or is lost

¹ Medical and aromatic plants of Albania, Tirana 1976, pg. 5

² Vangjeli J, Ruci B, Mullaj A. Red Book, Tirana 2007, p.6

without being traded/processed at all. According to information gathered from local sources (specialists, farmers and local collectors), the main producing localities are approximately presented in the following scheme:

4.2 Lezha Region

The Lezha District is one of the 12 districts of Albania and has an area of 1,588 km². The Lezha District includes the municipality of Kurbin, the Lezha municipality and the Mirdita municipality. The Lezha District administrative center is the city of Lezha. The Lezha District borders to the north with the Shkodra District, northeast with the Kukes District, east with the Dibra District, south with the Durrës District, and to the west with the Adriatic Sea.

The Lezha District has a population of 158,377 inhabitants. The economy of the region is based on agriculture and tourism (Shengjin area). The local administration of protected areas reports that there are about 2000 families that harvest medicinal herbs and forest fruits throughout the region. They are mainly females, and only a few are male.

The natural features of the relief of the Lezha region, its climate, soil characteristics and others other factors, have conditioned a remarkable variation of the flora, varied habitats rich in species, and in particular with medicinal and essential oil plants.

From the studies conducted it results that the total area of their distribution is 7737 ha. There are 23 identified species with high-level coverage, and the most demanded by the market, among which is worth mentioning Sage, Thyme, Breckland Thyme, Red Juniper, Dog-rose, Blueberry etc.

These spontaneous natural growing plants associated with forest vegetation, often establish their own formations. Their production capacity (medicinal plants) varies from year to year depending on climate features, the various interventions on this fund, etc. From the calculations, it turns out that the total production of aromatic medicinal herbs is 923 tons/year of dry mass, with the main share composed by of 562 tons of sage, 233 tons/year of thyme, breckland thyme with 83 tons, while the rest consists of other types³.

³ Administration of Medicinal Plants - Jak Gjini, Lezhe 2018.

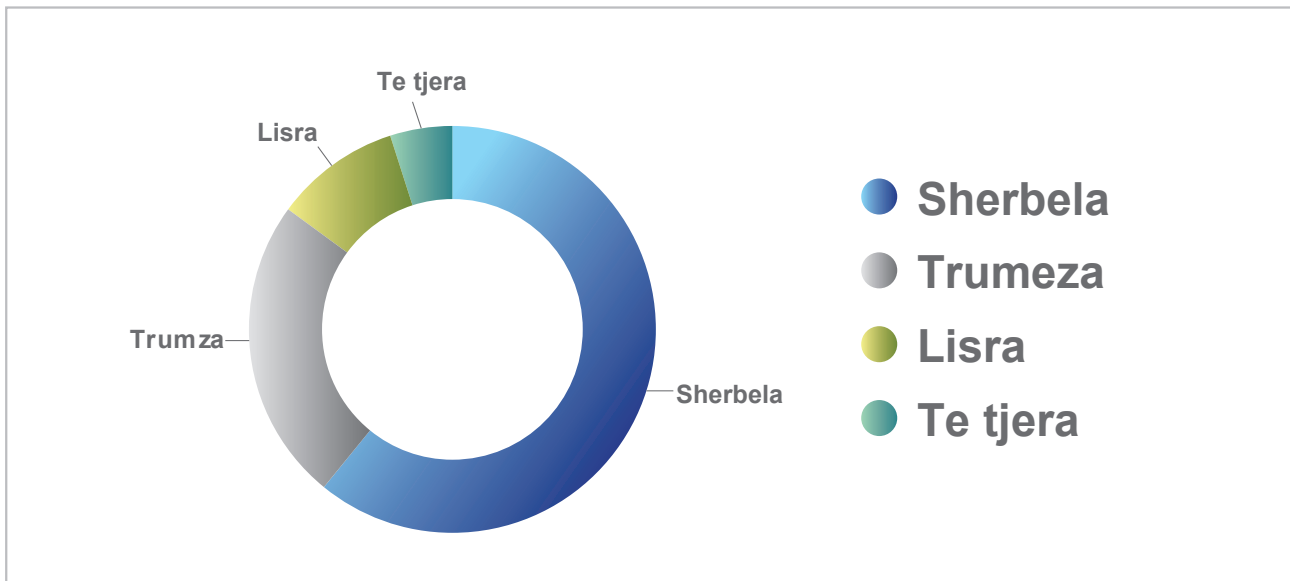


FIGURE 1. Spontaneous natural plants

The natural production resources that are managed correctly are bigger than the ones that the market demands today, as well as the number of types and products, and is a powerful basis to further strengthen this activity. Sage is a natural potential for development due to the specific properties of this plant, such as the high percentage of thujones in its essential oil (in Lezhe 32%, twice as much as that of the south). The high diversity of species is much higher than the varieties that circulates in the market. There are many types that have not yet penetrated the market, although they are in particular demand in the foreign market.

4.3 Kukes Region

The Kukes District is one of the 12 districts of Albania and has an area of 2,373 km². The Kukes District includes the Has municipality, the Kukes municipality and the Tropoja municipality. The administrative centers are: Kukes, for the Kukes municipality, Kruma for the Has municipality and Bajram Curri (formerly Kolgecaj) for the Tropoja municipality. The Kukes District borders to the northeast and to the east with Kosovo, to the south with the Dibra District, to the southwest with the Lezha District, to the west to the Shkodra District and to the northwest to Montenegro. The region has about 107,000 hectares of forests and 46,000 hectares of natural pastures. In them grow more than 1600 species of wild plants, of which more than 80 plant species are medicinal. Out of these medicinal plants, about 40 of them are harvested.

The Kukes District has a population of 117,000 inhabitants. The economy of this region is mainly based on livestock, agriculture and tourism (Valbona area). From field studies and information provided by the local administration, it turns out that there are about 3,000 families that harvest medicinal herbs and forest fruits. The interviews revealed that 70% of them are female and 30% are male, mostly young.

The natural potential of the medicinal and aromatic plants that this region possesses makes it one of the regions with the largest biodiversity of these plants. The altitude varies from 380 m (Black Drin Valley) to about 2400 m (the peak of Gjallica). Currently, the Kukes district is among the main regions for the collection of medicinal and aromatic plants (blueberries, thyme, oregano, mountain tea, crab apple, dog-rose, cowslip, black juniper, elder, nettle, poppy, orchis, chamomile, sansevieria, etc.).

Kukes (Kukes, Has, Tropoja): oregano on 1600 ha and 86 tons, sage with 783 ha and 192 tons, thyme on 1190 hectares with 52 tons⁴.

On a regional scale, the dry mass collected annually is composed of: 100 tons of birch leaves, 90 tons of hypericum perforatum, 40 tons of black juniper, 30 tons of dog-rose, 10 tons of red juniper, and about 60 tons of other plants, like elder, cowslip, mountain tea, yellow gentian, linden leaves, and nettle roots⁵

Data on the potentials of the main medicinal plants harvested for the protected area Korab Koritnik, on the area stretching on the Kukes district.

TABLE 1. Potentials of the main medicinal plants

No.	Denomination	Unit	Quantity	Comments
1	Annual amount of harvested medicinal plants (before 1990)	tons	850	The amount has been calculated on the basis of data from the state collection company
2	Amount of harvested medicinal plants today (2017)	tons	232	The data are based on statements from regional collectors.
3	Number of entities involved in collecting medicinal herbs	Entities	4	
4	Number of collection points (collection warehouses)	warehouses	3	

Source: Regional Administration of Protected Areas - Kukes 2018.

In the context of economic development, medicinal and aromatic plants also occupy an important share of the income generated by such produce. The area has an early tradition of collecting and using medicinal plants and aromatic herbs. Their harvesting, collection and trading play a significant role in generating income for rural residents of this region.

Currently, the Kukes district is among the main regions for the collection of medicinal and aromatic plants (blueberries, thyme, oregano, mountain tea, crab apple, dog-rose, cowslip, black juniper, elder, nettle, poppy, orchis, chamomile, sansevieria, etc.).

⁴ Natural potentials of medicinal aromatic herbs in Albania

⁵ ProMountain program - SNV, 2011,

The diverse relief and climate have contributed to the creation of microzones, which are suitable for the development of ecosystems rich in biological diversity. Thus, we have a variety of medicinal, essential oil and tanninous plants.

In Kukes, there are 45 species of trees and shrubs and 83 species of medicinal plants, but their number is even larger. The number of plant species currently harvested is about 30. Medical plants are an important source of income for many households in the villages. The municipalities of Kukes, Has and Tropoja have an early tradition of harvesting and collecting them. The harvesting was managed by the former collection company and their principal destination was export. In some former cooperatives, such as in Arren, Shemri, Surroj, there were established distillation plants for pine leaves and resin, for the production of essential oils. At present, plants are harvested primarily by villagers in their territories, and are then collected by local or other traders, who not always are licensed. Local farmers do not cultivate these plants, but merely harvest them in nature. In recent years, about 60 hectares of medicinal plants, mainly sage, and *Gentiana lutea* were cultivated.

TABLE 2. Type of collected plants

Type of collected plants	Kukes	Has	Tropoja	Total
(tons/year)				
Birch	60	-	-	60
Blueberries	40	-	40	80
Black juniper	70	-	40	110
Dog-rose	30	-	20	50
Crab apple	50	10	30	90
Total	250	10	120	380

Source: Kukes District Development Strategy 2012-2016.

4.4 Findings from the field: Challenges and needs for the development of the activity

In Albania, until 1990, medicinal plants were managed and administered only by state-owned enterprises and specifically by the Forestry and Pastures Directorates and collection companies. After the 1990s, medicinal plants were managed and administered only by the private sector. Despite the fact that the territories where the medicinal plants and forest fruits grown naturally are administered by state institutions, such as the Regional Protected Areas Administration (RAPA) or the Forestry and Pastures Directorates of the Municipalities, they have never been able to properly manage and control this important sector.

The private sector that was created after the 1990s had the following categories:

- harvesters - farmers;
- consolidators/collectors in districts
- large exporters

Until the survey of this study, as far as the inventory and data on medicinal plant collectors are concerned, none of the local institutions or bodies had a detailed system of data related to these businesses.

4.4.1. Identification of enterprises that deal with forest fruits and Medicinal Plants

The verification on the ground shows that in the Kukes region there are 8 businesses engaged in the collection of medicinal herbs and forest fruits, of which 4 businesses in the Tropoja municipality and 4 businesses in the Kukes municipality. Only the Has municipality has no businesses that collect medicinal herbs. Despite the fact that there are dozens of families in the Has municipality who collect these plants, because of the close distance they send the product directly to the collector in Kukes.

This region's collectors deal with the collection of medicinal herbs and forest fruits according to the requirements of the market. They collect dried produce, because they have no drying or refrigerating equipment.

Over the past two years, these businesses have invested in constructing and reconstructing storage facilities and warehouses with large capacities. (As is the case with the Hallaçi Company in Kukes and two businesses (Milushi, Zeneli) in Tropoja)

The medicinal plants and the forest fruits they collect are completely organic and natural, and are harvested in the woods. Businesses are linked (with no formal contract) to hundreds of households that collect natural products, and they pay for the produce they receive depending on their payment capacities.

The number of employees in these businesses is seasonal and ranges from 4 to 6 people, depending on the production and requirements of large exporters. They do not export abroad (with the exception of one collector in Tropoja - "Berbati"), but have good cooperation with Kosovo businesses. The latter come and take the produce themselves in the producers' warehouses.

Their main concern is the lack of drying equipment for medicinal plants and fridges for forest fruits.

In the Lezha region, 9 businesses operate in medicinal plants, namely: 4 businesses in the Lezha municipality, 3 businesses in the Kurbin municipality and 2 businesses in the Mirdita municipality.

In this region are the two largest exporters in Albania of medicinal herbs and forest fruits (Filipi Company, and Daci Company). The total number of employees of these two companies is about 250 full-time employees. These businesses have large storage capacities and export products mainly to America and European Union countries. However, the product is received from farmers in dry state and consequently according to them, in many cases this has created problems with the quality of the produce. The absence of laboratories and lack of knowledge of plant harvesters, have hampered the sale of such produce abroad in some cases.

Other businesses of the Lezha region have average capacities. The medicinal plants and forest fruits are collected dried, as they do not have the machinery needed for drying and processing of the produce on the site. The produce they collect is 90% natural and 10% cultivated.

Two companies (Filipi Company and Çupi Company) also produce essential oils, but according to the Çupi, the technology of oil extraction is outdated, due to their technological shortcomings.

From interviews, these businesses point out that there is an increase in the activity and interest from both farmers and European companies for Albanian produce.

4.4.2 Depopulation, quality of products

Rural areas, especially villages in the mountainous areas of Kukes, Has of Tropoja, are depopulated as a result of the population movement towards cities. This is why areas with high exploitation potential remain untouched. Often, insufficient capacities in drying facilities affect the quality and standards. The increasing the demand for medicinal and aromatic plants is a challenge for the processing industry of these plants, which need to manage the quality of required quantities.

International quality standards constitute one of the most important challenges, because a good share of the produce collected by the rural population contain dirt and grasses. Collectors should invest in obtaining the right knowledge and technology that will reduce the amount of waste and increase the quality of the traded produce. **Often times, the medicinal and aromatic herb harvesters do not have enough knowledge about the biology of growth and development of these plants or on the appropriate biological stage when the plants have reached the highest point of essential oils. Consequently, the plants are harvested without criteria, even by rooting them out.** Various human activities exercised in nature, such as deforestation, overuse of pastures, intentional fires, and over-utilization of medicinal herbs for economic reasons. Given the specific conditions of spontaneously growing plants, deforestation often affects the damage and disappearance of some types of species as a result of the collapse of their growth habitat.

4.4.3 Lack of trainings

In most cases, harvesters are untrained and use different harvesting methods such as uprooting with picks, and the part of the plant that is used is the root, making it useless for next year. In other cases, they cut a plant at its base, when only the flower or its leaves are required.

In the case of juniper, which is only used for its fruits, the ripe berries and the plants should be lightly shaken, but in most cases, they are strongly shaken, mixing ripe and unripe berries, which also affects the quality of the produce for the market. For this reason, some plants such as white oregano, orchis or *Gentiana lutea* with special medicinal values are almost completely extinct, while thyme is diminishing. These are among the most sought-after plants on the market today, but have been over-harvested, breaking off production for the coming year.

4.4.5 Unfair competition in the market

Cultivators and collectors of medicinal herbs in Kukes say the market is deformed and the revenues are not distributed fairly and honestly by exporters down the chain, and especially with the farmers who plant and cultivate the medicinal herbs. **They argue that the sector will be able to adjust and maximize profits only if it is formalized and starts to operate with contracts.**

Farmers, during the interviews, point out that exporters pay different collection prices for the same plant. Prices are often given on the phone, without any guarantees and payments to farmers are not made on time. According to Tropoja district collectors, the sector must urgently begin to operate with contracts, so it can guarantee the income of thousands of Albanian families involved in the business of medicinal plants who are among the poorest in Albania.

A problematic aspect that has been highlighted by the survey relates to defaulted payments and the creation of unpaid chain debts. Large collectors cannot pay the fees for small collectors in the districts, and the latter do not pay the fees for the medicinal plants and the forest fruits harvesters. Consequently, farmers are discouraged and will not collect next year, because of the uncertainty they have in receiving payments.

4.5 Other identified challenges

Protected area specialists point out that the production of sage has dropped by about 18%, of thyme by 4%, and of breckland thyme by 2%. The yellow gentian and orchis are moving towards the critical minimum. The continuing deterioration of endangered plants, such as the wild pomegranate, the degradation of the natural fund of medicinal plants is conditioned by:

- Multi-year and intensive exploitation without criteria. There is a reduction of up to 10 times less productivity compared to the years with the best production.
- Lack of knowledge and failure to apply the technical conditions of collection and treatment of medicinal plants. (new plants are harvested, there is no on-year break in harvesting every 3-4 years to allow plants to reflower so that they do not disappear from the flora according to the recommendations of specialists, etc.).
- Intervention in the use of the forest fund in an uninformed and abusive manner by different entities (destroying habitats from activities that affect deforestation, overgrazing, quarry activities etc.).
- The legislation and its implementation do not guarantee much protection. (Licensing, implementation of technical conditions).

- Competition between the entities and individuals that collect the medicinal plants has increased the over-exploitation of medicinal plants.
- Collection of few medicinal plants mainly for market reasons, giving little opportunity to unemployed and individuals in need.
- Improper engagement of local government to protect medicinal herbs as irreplaceable natural values and in general for environmental issues.
- Lack of monitoring resulting in the absence of accurate knowledge of the condition of the medicinal plants.
- Lack of awareness about rational use and knowledge of technical conditions related to harvesting.
- Low level of well-being, poverty and minimum income.
- The weakening of the community's sensitivity to the use of medicinal herbs and forest fruits, lack of recognition in this regard, poor and old literature etc.
- Students and youth have little knowledge of medicinal plants, school programs do not provide enough knowledge in this regard. There are some shortcomings in familiarizing students with the area's medicinal plants.
- Climatic conditions not very favorable for several years (prolonged drought).
- Lack of processing technologies: drying, storing and packaging is not done according to requirements.
- Farmers are not stimulated by government programs or donors for the cultivation of medicinal herbs facing extinction. It is worth mentioning the case of gentiana cultivation in Shishtavec, Kukës.

4.6 Employers' needs to reduce gap between demand and supply.

- Growth of financial capacities for warehouse construction, processing plants, presses, drying equipment, fridges, etc.
- Financial support for the construction of laboratories for conducting very essential analyzes for the foreign market.
- Creating direct links with the foreign market (this is for small collectors). This has to do with the capacities, because the collectors have more confidence in the direct link than in selling to large collectors.
- Incentives to increase harvester's earnings, as there is a lack of workforce in harvesting spontaneous plants and fruits in some areas.
- Legal support for the non-fragmentation of forest economies by claimant owners and the use of these economies for medicinal plants.
- Support and control of compliance with the technical criteria for harvesting, harvest before optimal technical time, and removal of the reproductive and vegetative mass.
- Establishing stronger criteria for evaluating bio-natural and cultivated drugs. Plants cultivated in the Great Highland of Shkodra have significantly reduced the price of the products, especially in the domestic market.

4.7 Collection, processing and marketing of forest fruits.

The most popular forest fruits in the Kukes and Lezha regions are chestnuts, wild pomegranates, blueberries, blackberries, raspberries and strawberries. Tropoja has an area of 2000 hectares of chestnuts and Kukes has an area of 700 hectares, making it the largest massif in the Balkans, with annual production of about 4 thousand tons.⁶

4.8 Local chestnut collectors and street traders.

In all the district of Tropoja, currently operate about 4-6 small collectors who are spread across different areas. During the Chestnut production season in Tropoja there are also some street traders from other areas of the country who collect chestnuts from farmers and/or local collectors, and sell them later in the markets of the main cities of the country. These local collectors and seasonal and street merchants collect, depending on the year, about 35-40% of the harvested chestnut produce of the area (or about 750-800 tons/year depending on the years) and trade them fresh, of which: (a) about 45% is traded on domestic markets, mainly in the areas and markets of Tirana, Durres, Vlora, Fier, Korça, etc., and; (b) about 55% is marketed in Kosovo markets. Also, a very limited number of farmers (mainly the few farmers who own the means of transport) transport the produce from Tropoja to local markets (mainly Tirana, Durres and Shkodra) in order to get a somewhat higher price.

The sale of chestnuts in Kosovo has become harder in recent years, mainly due to the poor functioning of the Qafe Morina customs point and the difficulty of small collection businesses operating in the area to meet the conditions of tax documentation (Albanian and Kosovar). Consequently, over the last two years, there has been an increase in fresh chestnut trading in the markets of major local cities (such as Tirana, Durres, Vlora, Fieri, Korça, etc.). However, these domestic markets remain very spontaneous and uncertain, which combined with the lack of production capacity and storage capacities for a period of time makes it very difficult to engage in secure collection activities for these market players.

4.9 Chestnut collectors and processors.

Regarding the processing, despite some attempts by 2-3 local businesses, currently in Tropoja are collected and processed about 500-600 tons/year (estimated at about 20-25% of the annual produce of the area or about 45% of the marketed production per year). These amounts are collected by the company or through its collection points or by direct delivery to the processing center by farmers. In this case, the collection price from the farm is about 150-180 lek/kg depending on the quality of the fruit.⁷

Between 2010 -2012, "Ambla" company in Tropoja invested in the establishment of a chestnut processing center, but the investment was not completed and the plant could not be put into operation due to the lack of support from agriculture programs, donors or the Ministry

⁶ Regional Directorate of Agriculture Kukes, 2018

⁷ Regional Directorate of Agriculture Kukes, 2018.

of Agriculture. If supported, this investment would guarantee the employment of about 1,000 Tropoja households.

From the information obtained in the field, it can be noticed that in addition to the other measures, a first-hand role is played by the processing of chestnuts into other byproducts such as: dried and peeled chestnuts, flour, dough, fresh, etc. The restoration of the processing capacity of the existing processing unit and the construction of another or more chestnut processing units is considered as the “savior” of this product.

Through this plant, it will be possible not only to collect the total produce of chestnuts as raw material, but the most important is the increase of storage/preservation capacities of raw materials and their by-products, thus ensuring the safe marketing of chestnuts, which usually have a very short harvest period and a very accentuated production peak (late September to mid-November).

If there will be an intervention in this direction, the processing potential will be increased three or four-fold (from 500-600 tons/year currently being processed to 3,000 tons/year within a three to four-year period). This measure will most push farmers into seeing the chestnut as a plant of great interest and they will definitely return to it.

4.9.1 Unmarketed produce

A significant amount of chestnut produce from this area (or about 30-40% or 800-1000 tons per year) fails to find the way to the market and a majority of this product is lost. According to estimates of area specialists, about 200-300 tons/year of this amount is consumed by the area's own families, while the bulk (about 600-800 tons/year) goes to waste as a result of the lack of sales in markets.

4.9.2. Barriers and difficulties to the value chains

From the conducted survey and the collected information, it results that, along the chains of this activity (aspects of production, collection, processing, transport, promotion, etc.), in addition to the advantages there are also a number of difficulties and obstacles which directly and negatively affect the development of this activity.

From the findings of the survey and the collected information, it turns out that there are a number of difficulties in the collection and processing chain:

- 1) As long as the sale of all the collected and processed produce is not secured, and the satisfactory price is not yet in the right level, most farmers have apparently shown a sense of mistrust and they really feel demotivated.
- 2) Based on the fact that most chestnut plantations⁸ are not privatized on a farm/family basis, but are privatized on a neighborhood/village or a family group basis (according to traditions), this has led the diminishing of the collective work spirit in terms of agro-technical services

⁸ Natural chestnut wood plots

(mainly for thinning, scaling, protection from diseases and pests, erosion protection, etc.). Thus, the plants have undergone vegetative deviations from cultivated to wild and/or ½ wild plants, and production has fallen significantly by over 55-65% less than their normal capacity.

- 3) Lack of plant care, vegetation grown under the crown of plants (because they are not cleaned), delays the timely harvesting of fallen fruits. This has affected the loss of their quality and the onset of infection by the larvae of *Carpocapsa pomunella*. There are no tools for storing fruit for longer times in farm conditions, such as baskets, special cases, etc., which create microclimatic conditions for a more specialized storage.
- 4) Insufficiency of the labor force, where young people have mostly migrated and farms are left only with workers that due to their age, despite being well specialized, lack the physical capabilities to withstand the needs for the provision of technical services to the plants. Market shortages and instability remains one of the main problems that discourages farmers from taking care of chestnut plantations. Based on collected information, traders (especially street traders) play far too much with the purchase prices of the fruit from the farms, as the difference between the purchase price and that of the sale in the markets/stores is about 50-60 lek/kg, which is another demotivating factor for this sector. Insufficient mobilization and organizational work (lack of formal or informal clusters and associations, as well as the phobia against them) have contributed to the reduction of interest for this plant, etc.;

4.9.3 Main obstacles and difficulties in processing aspects

From the conducted surveys and the gathered information, it turns out that there are a number of difficulties, and the most important are:

- The technology is almost antiquated (simple), and most obvious is the fact that processing lines have limited capacity for processing fruit into by-products such as flour, dough, dried, etc.
- There is a lack of necessary technical capacities to achieve timely and quality washing, calibration and drying processes. As a consequence, the possibility of collection and storage of such produce at the point of production, is low.
- There is a lack of proper tools and equipment to peel the produce with the right quality, and to package it according to the required international standards.
- Problems with transporting the produce and exporting them to the destination, the long and impossible route from Tropoja to Qafe e Malit (by ferry on the Koman Lake is impossible, because of the size of trailers). Also, the possibility of crossing to Kosovo and then to the port of Durres makes this procedure extremely difficult.
- Local collectors, who collect fruit from farms and then transport it to the processing point, have no adequate storage conditions, and consequently the quality of the fruit is damaged, with high temperature and/or below the required quality.
- Means of transport from collection points to processing unit. Usually trucks are used for different transport and are not suitable for transporting chestnuts.

4.9.4 Performance of medicinal plant businesses over the last years

Over the past 3 years, according to data, businesses have increased their activities and income by 30%. Consequently, they have also made investments in warehouse construction and capacity building

In both Albania and Kosovo, there is a great potential of unused medicinal herbs and forest fruits. According to forest specialists, only 60% of the capacity of medicinal herbs and forest fruits is utilized. Moreover, there are thousands of hectares of non-cultivated, available agricultural land, which can be planted with medicinal and aromatic plants.

According to INSTAT, the export of medicinal herbs and forest fruits over the last 3 years has risen by more than 30%. Even interviews with collectors of these herbs confirm this fact. All, without exception, emphasize that this sector has a huge potential for employment and income-generation, especially for families in need.

Likewise, this sector is assisted by the cheap labor force, especially women and young people. The location of the settlements near the areas with medicinal herbs and forest fruits enables the harvesting of such produce. Another strong point is that poor families have many members and the harvest of medicinal plants coincides with the period when pupils and students have completed the school year period.

5. KOSOVO

Kosovo has an area of about 1.1 million hectares. Out of this area, about 50 percent is classified as agricultural land, 44 percent is forest land, and the remaining 6 percent is defined as land for other uses. Out of the 2011 census results, Kosovo has a total of 1,739,825 inhabitants, excluding population residing in the municipalities of Leposavic, Zubin Potok, Zvecan and North Mitrovica (KAS, 2013). The same data show that the majority of Kosovo's population lives in rural areas (62%), while 38% live in urban areas.

A total of 180,800 ha (38%) of Kosovo forests are classified as privately-owned forests and 295,200 ha (62%) are classified as state forests. Kosovo has adopted the Law on Forests (2004), which constitutes the legal basis defining forests as national resources, which must be managed to ensure sustainable development.

The Kosovo Law on Forests (Official Gazette of the Republic of Kosovo, 2004) constitutes the legal basis that defines forests as national resources, which must be managed to ensure sustainable forest development as a resource of general interest.

According to findings from the National Forest Inventory Report in Kosovo (Tomter et al., 2013), the country has a total forest area of 481,000 ha. Forests are mainly dominated by deciduous trees, covering 93 percent of the total forest land, and coniferous trees, which cover almost 5 percent. Given the fact that 44 percent of the country's total area is covered with forests, which are characterized by high productivity and diversity. All relevant studies indicate that if these resources are managed sustainably, the forest sector, in particular non-wood forestry products, including forest fruits and medicinal herbs, could provide more employment opportunities, especially for rural residents.

The Horticultural Promotion Report in Kosovo (Boor, 2011) shows that Kosovo has the potential to collect at least 29,000 tons of non-wood forestry products, including 85 species of high economic potential, such as oregano, menta, primula veris, blackberries, raspberries, chamomile, thyme etc. According to the same report, there are about 11,400 harvesters, 100 growers, 40 collection centers and 10 active processors in Kosovo.

According to the report of the inventory of aromatic medicinal plants in Kosovo (Millaku, 2010) the most requested for export are: blueberries, juniper, cowslip, birch, elder, crab apple, wild crapemyrtle, cornelian cherry, hypericum perforatum, yarrow, nettles, breckland thyme, dog-rose.

5.1 Municipal profiles

This section of the report will provide short information on each municipality (OSCE Municipal Profile, 2018) included in this survey.

5.1.1 Municipality of Prizren

The municipality of Prizren is located in southeast Kosovo. It covers an area of approximately 640 km² and includes the city of Prizren and 74 villages. According to census data for 2011, the total population is 177,781. The climate of Prizren has a continental character with a slight influence of the Mediterranean climate at lower altitudes, while the mountains are dominated by temperate alpine climate. The soft climatic features are the reason for its rich natural resources. They help in the cultivation of grapes and other fruits and vegetables. Forests in Prizren have an area of 8,500 ha, with dense forests and low intensity forests making up only 13% of the municipality (Prizren Municipal Profile, 2007).

The economy of the municipality of Prizren is mainly based on agriculture, trade, construction and food processing, all private. There are about 5,400 registered private businesses operating in the municipality. There are no reliable data on the number of people employed in the private sector.

5.1.2 Municipality of Dragash

The municipality of Dragash is located in southern Kosovo. It covers an area of approximately 435 km² and includes the town of Dragash and 35 villages. According to census data for 2011, the total population 33,997. The economy of the municipality of Dragash is mainly based on agriculture and small businesses. There are about 744 registered private businesses operating in the municipality, with about 1,152 employees. This municipality has a relatively high elevation, ranging from 700 to 2550 meters above sea level, which makes for long winters and short and fresh summers in this municipality.

With little economic potential, unemployment is high, resulting in a significant migration from the area. However, it is rich in natural resources, with mountainous areas, large forests and fertile agricultural land. Farmers in the Dragash region are well known for milk production, including many types of cheese, while the harvesting of raspberries and other non-wood forest products is also commonplace. It is one of the most densely populated and poorest regions in Kosovo. It is estimated that about half of the population is under 30 years of age (ASK, 2011).

5.1.3 Municipality of Mamusha

The municipality of Mamusha is located in southeastern Kosovo and covers an area of approximately 11 km². According to census data for 2011, the total population is 5,507 inhabitants. The economy of the municipality of Mamusha is based mainly on agriculture and trade activities. There are about 800 registered private businesses operating in the municipality. There are no reliable data on the number of people employed in the private sector.

5.1.4 Municipality of Suhareka

The municipality of Suhareka is located in southeast Kosovo. It covers an area of approximately 361 km² and includes the town of Suhareka and 42 villages. According to census data for 2011, the total population is 59,722. Out of the total area of the municipality, 15,074 ha or 41.7% are covered with forests, 19,373 ha or 53.7% are agricultural lands and 1,652 ha or 4.6% are other areas (Suhareka Municipal Profile, 2005).

The economy of the municipality of Suhareka is mainly based in rubber, clothing and beverages, alcoholic and non-alcoholic, small production and trade. There are about 3,700 registered businesses out of which about 2,316 businesses are active, while the rest are considered inactive. There are no reliable data on the number of people employed in the private sector.

5.1.5 Municipality of Rahovec

The municipality of Rahovec is located in southwestern Kosovo. It covers an area of approximately 275 km² and includes the town of Rahovec and 35 villages. According to 2011 census data, the total population is 56,208.

The municipality of Rahovec is a renowned agricultural area. This municipality is valued for the quality of grapes and wines it produces. The economy of the municipality of Rahovec is mainly based on agriculture, especially viticulture, and the manufacturing of plastics, heaters, freezers and recycling. There are about 1,120 registered private businesses operating in the municipality. There are no reliable data on the number of people employed in the private sector.

5.1.6 Municipality of Malisheva

The municipality of Malisheva is located in southeast Kosovo. It covers an area of approximately 306 km² and includes Malisheva and 43 villages. According to census data for 2011, the total population is 54,613. The economy of the municipality of Malisheva is mainly based on agriculture and small retail businesses. There are about 1,434 registered private businesses operating in the municipality.

5.2 Findings of the survey

The information provided in this section provides an overview of the challenges and needs of employers who deal with the collection, processing, cultivation and sales of forest fruits and medicinal plants.

The data from the conducted interviews indicate that in the selected region for the survey, a total of 9 businesses have been identified that deal with this activity. In Appendix B, there is a list of Kosovo collectors, together with details of what they collect and where they exercise their activity, along with other identifying information.

Most of the businesses identified in these municipalities are relatively stable financially, especially those that are on the market for a longer time. Two of the total number of businesses realize direct exports to European countries, while the rest sell products to the largest exporters in Kosovo. Only one of the identified businesses has the local market as its primary target, and in the medium term does not plan to export its products. In addition to businesses in the Dragash region, whose products are collected directly in the forests, most other businesses are engaged in forest fruits and medicinal plants cultivation in agricultural lands, which meet organic conditions to conduct such an activity.

Respondents in the Dragash area mainly collect, dry, process, and sell raspberries, nettles, alchemilla vulgaris, almonds, linden, birch, hypericum perforatum, chamomile, medicinal strawberries, crab apples, blueberries, elder and cowslip.

Various surveys show that this region is rich in forest fruits and medicinal plants, and among the most sought-after products for export are: juniper, cowslip, elder, blueberries, cornelian cherry, wild crapemyrtle, hypericum perforatum, yarrow, nettles, breckland thyme, crab apple, linden, blackberries, raspberries and various kinds of mushrooms.

TABLE 4. Identified businesses, activity, needs and challenges

Location	Activity	Challenges and needs
Prizren	Collection, drying, processing and packaging (for export) of forest fruits and medicinal herbs. The business also engages in cultivating of blackberries. The business sells the produce to Agroproduct, Istog.	<ul style="list-style-type: none"> • Unfair competition in the market; • Unpredictable price changes of produce; • Lack of institutional support; • Lack of young people's interest in working in this sector; • Need for networking with Kosovo businesses but also the region; • Administrative facilities for businesses that aim at exports; • Need for additional storage and processing equipment.
Dragash	Collection, processing and export of forest fruits and medicinal herbs. Two of the identified businesses make their own exports of produce, while two others sell them to the largest exporters in Kosovo.	<ul style="list-style-type: none"> • There are not enough workers/young people to work, especially in plantations. • Inclusion of women in this activity is too low. • Banking interest are too high • Problems with harvesters from Albania: poor quality of produce, harvest before ripening. • Lack of institutional support; • Lack of space; warehouses and storage facilities for storing goods (characteristic for new businesses) • The results of product analysis (in the Peja Agricultural Analyses Laboratory) are sometimes delayed; • Need to be trained for various customs procedures; • Need for additional storage and processing equipment.

Suhareka	Processing, cultivation, packaging and sale of teas such as: chamomile, ginger, sage, elder, cranberry and blueberry. The business targets the local market. It collects, processes and sells processed plants products. The business sells the produce to Agroproduct, Istog.	<ul style="list-style-type: none"> • Lack of trained workers in harvesting and processing; • Lack of young people's interest in working in this sector; • Lack of institutional support; • Need for networking with Kosovo businesses but also the region; • Administrative facilities for businesses that aim at exports; • Need for additional storage and processing equipment.
Malisheva	<p>The business is collecting, processing and cultivating aromatic herbs and producing organic seedlings. By 2014 the business started with the cultivation of medicinal herbs.</p> <p>The business sells the produce to Agroproduct, Istog.</p>	<ul style="list-style-type: none"> • Follow up/support businesses until they become financially sustainable; • Complex export procedures, administration and additional costs for preparation of documents; • High tax (18% for products); • Need for wells (irrigation systems) for farmers dealing with the cultivation of such produce; • Staff training on establishing contracts; • Assistance in advertising and promotion of products and their biological added value; • Facilitating business participation at fairs • Support to conducting study visits in Albania/Kosovo • Need for additional storage and processing equipment.
Rahovec	Collection, cultivation, drying and sale of teas and herbs. The business sells the produce to Agroproduct, Istog.	<ul style="list-style-type: none"> • Quality assurance of products - very high standards that must be met; • Very high own-source investments at the beginning of business development; • Not facilitating bank loans to businesses in this sector; • Need to increase cooperation between farmers; • Lack of cultivation experience; • Need for training in the field of bio-certification;
Rahovec	Collection, cultivation, drying and sale of teas and herbs. The business sells the produce to Agroproduct, Istog.	<ul style="list-style-type: none"> • Quality assurance of products - very high standards that must be met; • Very high own-source investments at the beginning of business development; • Not facilitating bank loans to businesses in this sector; • Need to increase cooperation between farmers; • Lack of cultivation experience; • Need for training in the field of bio-certification;

Clarification: Most of the businesses identified have almost the same challenges and needs; depending on the level of development and the duration of their presence in the market. However, the table is intended to provide information that is more typical/characteristic for certain businesses. This does not mean that the needs identified in a municipality are not present in the businesses of the other municipality. More information on the challenges and needs of employers is presented in the section below.

5.2.1 Development potential of this sector

According to the survey conducted for this activity, in recent years the collection of forest fruits and medicinal plants has been spontaneous, poorly organized and characterized by lack of control and monitoring by local institutions responsible for forest management (Millaku, 2010). The same report shows that this has caused damages and reductions in the fund, mainly of aromatic medicinal plants, such as *Gentiana lutea* and *Gentiana punctata*, which are considered to be at risk of extinction.

Generally, the identified businesses have the proper infrastructure and tools to dry, refrigerate or store the collected products, depending on their capacity. The region where the interviews with employers were conducted is very rich in forest fruits and medicinal plants. The survey confirms once again that for many residents of rural settlements close to areas rich in medicinal plants and forest fruits, this activity represents a source of additional income, even their single income.

Over the years, businesses have increased the quality of the harvested produce, have improved the methods of monitoring the work of harvesters, such as coding harvesters to avoid product quality problems. According to business representatives, in recent years there has been an increase in the harvested amount of produce, as demand in the international market has increased, while requests for organic product certification have also increased. Moreover, businesses have improved their administrative and logistic capacities.

Businesses (depending on the activity) have dryers, refrigerators, and transport vehicles for the most remote areas. Most of them are supported by donors with capacity building. In general, the largest investments have been made with self-financing, and this is at the start-up stage. This has been very difficult for most businesses, given the high interest rates of commercial banks in Kosovo, insufficient support from state institutions; central and local ones.

Out of 9 businesses, 2 of them engage in exports, while 6 others sell their products for export through the Agroprodukt company in Istog. Only one of the interviewed businesses has targeted the local market (cultivation, drying and packaging of teas) and shows no interest in exports.

All reports in this area confirm that the MPs and FFs sector in Kosovo as a whole has developed tremendously. And its structure has changed. Larger businesses have invested heavily in the past years. Some may have been driven by development projects that have offered co-financing through the provision of equipment, and may feel pressured because of the high interest rates they have to pay to banks. In addition to businesses that are already directly exporting their products, most of them have difficulties in establishing contacts with businesses of this nature in the region, or even networking with EU businesses that can buy their products.

The harvesting of such produce is considered as a generator of income for many families, in which all family members are involved. However, there are no data on the exact number of residents, especially women and children, involved in these activities, since in most cases all family members are engaged in harvesting. Most harvesters lack the relevant education, especially for

post-harvest activities, which is one of the reasons why the quality of the harvested produce is often compromised and, consequently, undermines the businesses in question.

5.2.2 Employment in the MPs and FFs collection and processing sector

From the data generated by the nine interviewed businesses, the number of full-time employees over the 12 months ranges from 3 to 20. In general, the sector operates throughout the months when there is a great productivity of such produce, which are the months of May-November. This is the period when businesses employ a larger number of workers, who are mainly placed in so-called plantations, and the number of seasonal workers ranges from 10 to 70.

The interviewed businesses have service contracts with a large number of households, ranging from 40 to 150 families engaged during May to November to harvest forest fruits and medicinal plants, or families that cultivate such produce while respecting bio-organic standards.

According to the majority of respondents, revenues for the harvesting and cultivating families throughout the season range from 7,000 to 10,000 Euros; depending on their engagement and the availability of certain produce in the field.

Although there is information on the approximate number of families involved in this activity, it is not clear whether the same households collect produce for different businesses.

5.3 Challenges and needs in business development

5.3.1 Business development conditions

Part of the identified business challenges are related to the conditions and the environment of doing business in Kosovo. The high interest rates of commercial banks have been a problem for all interviewed businesses. Lack of marketing and promotional activities of their products and businesses has been seen as a challenge in expanding the market in this activity, especially for businesses that aim to expand their reach in the local market. Usually, products are promoted only during different fairs for sales in local markets.

Lack of fair competition in business development remains one of the employers' challenges in this sector. The lack of monitoring mechanisms that will ensure a consistent practice of collecting such produce, the licensing of active collectors in the market will not only combat the informality in this sector, but will also ensure the long-term sustainability of such products.

5.3.2 Human resources

Most business representatives express concern about the lack of interest from young people to work in this activity during the season, especially on plantations. Inclusion of women is also too small.

Businesses need trained staff for harvesting, cultivating and processing FFs and MPs, as well as other professional staff, such as managers or accountants. Cooperation with the Center for Social Work in the respective municipalities is seen as extremely necessary. This includes awareness raising, but also harvesters' training on recognizing produce, timing of harvesting and adequate drying, taking into account quality standards. This also includes the harvesting, cultivation and processing of forest fruits and medicinal herbs.

5.3.3 Sites and equipment for keeping and storing products

Small businesses especially have challenges in securing sites for their products, for their drying and proper storage, such as warehouses.

Appropriate drying and storage facilities are seen as a major business need. Although most of them have invested their own resources to purchase such equipment or have benefited equipment through grants, possession of equipment for certain products, which in most cases are very expensive, remains a challenge for businesses that want to develop their activity with new products.

The need for assistance in purchasing equipment is especially high among new businesses, who often in the absence of collateral cannot take out loans from commercial banks.

5.3.4 Quality of harvested produce

A particular problem in ensuring the quality of produce, especially for exporting businesses, is the issue of quality. In this regard, the main complaints are that the products collected by individual harvesters are not ready for harvest and often contain waste, in order to weigh more during the sale. This is a challenge for businesses, especially the border region with Albania, and it is more characteristic of the harvesters of such produce coming from Albania. The coding of collectors has contributed to addressing this problem more adequately, however it remains one of the challenges.

5.3.5 Networking and creating new business connections

While the largest and most economically sustainable businesses do not have this problem, for smaller and start-up businesses the challenge is to create new business relationships with businesses in the country and those in the region, networking and staff training to achieve faster and more stable penetration of these businesses in the market. Moreover, they need to assistance to participate in different fairs, where they can exhibit their products. Many of them point out that donor organizations have been the only ones that have helped them set up their business, whether through trainings, by donating equipment, or even facilitating the creation of contacts with the markets of for the sale of products within and outside the country.

Representatives of businesses also consider as a challenge the lack of information exchange between businesses engaged in this activity, especially those of the same region.

5.3.6 Lack of market-related information - export

Most of the interviewed businesses point out that customs procedures and instructions are quite understandable to be followed by businesses. However, businesses that want to start exporting need to learn about customs procedures and rules and also to be notified in time for changes in customs procedures.

Usually, businesses engage families in the region to harvest the products. This cooperation is primarily realized through contracts with harvesting families, and payment are made in cash on the same day the produce is delivered. In the event of a failure of further produce sales, (non-exporting) businesses may face the risk that their produce will go to waste if it is not sold to exporters in a relatively short time and depending on the type of produce.

5.3.7 Low presence in the local market

Most respondents do not have any strategies to increase the visibility of their products in the Kosovo market. Apart one business in Bllaca, Suhareka, that has customers in the local market and has long-term aims for this market, the rest of aim at exports. This directly affects the low awareness of such produce on the Kosovo market and the import of the same produce (which are exported), but at a higher price for the local consumer.

5.3.8 Awareness of the population on the importance of forests as a source of income

All respondents emphasize the importance and the necessity to raise awareness and provide timely and comprehensive information on the role, importance and benefits of non-wood forest products, such as forest fruits and medicinal herbs. This is considered extremely important, especially for families who live very close to forests and for whom this activity could provide an optimal family income.

All identified businesses confirm the region's potential to develop this activity. However, in addition to the challenges mentioned above, there are also those related to human resources. Some of them have difficulties in recruiting seasonal workers, as the interest of the population, especially young people and women, is very low. According to one of the business representatives in Dragash, "the international market demand for such produce is secure and growing every year, but I fear that in the near future there will be no young people interested in harvesting such produce". For this reason, awareness and information of the population about the role, importance and benefits that can come from such produce is seen as key to the sustainability of this activity in the respective region.

Other surveys have also confirmed the lack of interest in harvesting in the herbaceous sector (UNDP, 2016). According to the same report, the population does not show interest in the harvesting herbs, mainly due to the lack of post-harvest capacities, such as: drying and storage, and the share of population participation in this sector has declined over the years.

6. CONCLUSIONS AND RECOMMENDATIONS (COMMON FOR THE TWO COUNTRIES)

Medical plants and forest fruits are considered as an important natural resource for the development of rural areas. This potential should be monitored and evaluated by researchers and experts in order to ensure their sustainable use. Continuous monitoring will determine the potential for use and will identify products that are at risk of extinction. Combating price informality is a complex but very important issue for the population and business involved in this sector. For this reason, the standardization and publication of the selling prices of such produce should be introduced.

Although in recent years the governments of the two countries have shown readiness to develop this industry at the country level, through the provision of subsidies to businesses engaged in the harvesting and cultivation of such produce, more support is still required to improve their processing technology, but also to safeguard them. Raising the awareness of farmers about harvesting standards for such produce, so that they are clean and free from other mixtures, is another recommendation that emerges from this study. This would lead to increased standardization and the quality of produce growing in Albania and Kosovo. Achieving these standards and the quality of the collected produce would naturally lead to increasing the level of competitiveness with the countries of the region. For this reason, it is necessary to conduct advocacy activities on harvesting, collection and drying techniques with the rural population engaged in harvesting.

The report confirms that forest fruits and medicinal plants harvesters are mostly family members who live near the forests where such produce are harvested, which are specific to the Dragash region and the regions of Albania. In other municipalities, forest fruits and medicinal herbs are primarily cultivated in arable lands, preserving the pure organic quality required from the cultivation land.

Businesses face a number of challenges and challenges, such as the lack of favorable bank loans to develop business, the lack of equipment that assures but also enhances the quality, thus increasing the value on the international market, the need for training of collectors and their seasonal and management staff, the need for networking with businesses in the country but also in the region etc.

To address all the challenges and needs identified during the interviews with business representatives, herein are listed recommendations that aim to address some of the findings in the report:

- 1)** Facilitate Doing Business in this sector - Support businesses, especially start-ups, with grants and subsidies from relevant institutions but also development organizations.
- 2)** Capacity Building of Human Resources - Persons engaged in the collection, cultivation and processing of FFs and MPs should be trained to recognize the produce they collect, the harvesting method, the cultivation processes and their further processing aspects, times and procedures that must be applied throughout the process. Businesses should also be supported in building the managerial, financial and administrative capacities of their staff.
- 3)** Design and development of a national strategy - This would ensure a sustainable development and adequate management of this sector. It is very necessary to make legal improvements so that the collection of medicinal plants and forest fruits is done only by licensed entities.
- 4)** Encourage collectors, assistance and facilities for planting medicinal plants in degraded sites. Raise the awareness, attract and encourage donors to invest in this direction.
- 5)** Support the development of a local strategy for the development of the forest fruits and medicinal plants sector in accordance with the national strategies for the development of non-wood forest products. This strategy should include the involvement of all relevant actors in this field.
- 6)** Develop a register of all collectors at the municipal level and all other actors working in this sector.
- 7)** Help improve the marketing and promotion of the added value of such produce, especially in the local market.
- 8)** Help improve the capacity of businesses and those who want to start business in this sector in procedures related to grant applications and subsidies.
- 9)** Help businesses, especially those that have just been created, in the networking process, creating new business connections, participation in trade fairs, etc.
- 10)** All forest fruits and medicinal plants collectors engaged in this activity should be licensed by the relevant institutions, and set harvest quotas for such produce. The quota should be set without risking the disappearance of the produce in the long run.
- 11)** Help businesses engaged in this activity in creating regional or cooperative associations, through which will be encouraged and enabled the employment of young people and women, in particular. This could also include the creation of small collectors' cooperatives/associations, distributed in certain regions.
- 12)** Provide legal and administrative assistance to new businesses.
- 13)** Promote women's and women-led businesses' involvement in this activity, especially in the deepest rural areas, either through the provision of subsidies, grants or the drafting of business plans to apply for grants.
- 14)** Facilitate study visits of businesses from both countries, with the aim of learning new, different experiences and success stories.

7. REFERENCES

- UNDP (2016). Value Chain of dairy and meat; fruits, vegetables and cereals; herbs; bees; forest fruits; and textiles and clothing. Detailed implementation plan with cost estimates. Municipality of Dragash (Available at: <http://www.ks.undp.org/content/dam/kosovo/docs/Inter%20Dev/Dragash%20Value%20Chains%20Implementation%20Plan%20ALB.pdf>)
- Boor, B. (2011). Horticulture Promotion in Kosovo (2011). Helvetas, Swiss Cooperation. Prishtina. (Available at: <http://helvetasks.org/HPK/documentation/marketing/Market%20studies/HPK%20NWFP%20Report%20oBirgitt%20Boor%202011.pdf>)
- KAS (Kosovo Agency of Statistics). 2013. Kosovo Population census 2011. Prishtina. (Available at <http://ask.rks-gov.net/media/2129/estimationof-kosovo-population-2011.pdf>)
- Official Gazette of the Republic of Kosovo. 2004. Law No. 2003/3 on Forests in Kosovo. (Available at: http://www.gazetazyrtare.com/egov/index.php?option=com_content&task=view&id=244&Itemid=28&lang=en).
- MESP (2005). Municipality of Suhareka. Ministry of Environment and Spatial Planning. (Available at http://www.ammk-rks.net/repository/docs/AH_-_Suhareke.pdf)
- Millaku F. (2012). Inventory - Aromatic medicinal plants and wild fruits in Kosovo. Available at: http://www.helvetas-ks.org/HPK/documentation/technical_reports/101007_RaportiiinventaritteBMA dhePFE.pdf
- Tomter, S.M., Bergsaker, E., Muja, I., Dale, T. & Kolstad, J. 2013. "Kosovo National Forest Inventory 2012". Prishtina, Ministry of Agriculture, Forestry and Rural Development in Kosovo and Norwegian Forestry Group. (Available at <http://www.nfg.no/userfiles/file/kosovo/kosovo%20national%20forest%20inventory%202012.pdf>)
- Voit M., & Barrientos M. (2013). Municipal Development Plan for the municipality of Dragash 2013 – 2023. United Nations Development Program (UNDP). (Available at: http://www.ks.undp.org/content/dam/kosovo/docs/Dragash/mdp/AL_MDP%20Part%20%202013-2023%20Dragash%20Final%2026.08.2013.pdf)
- Official Publications Center (www.qbz.gov.al; www.legjislacioni.gov.al).
- Mulaj Z., 880 Medicinal Plant in the Alps of Albania, Edloar, Tirana, 2008. Medicinal and aromatic plants of Albania, Tirana 1976, p.5

Vangjeli J, Ruci B, Mullaj A. Red Book, Tirana 2007 fq.6 JAK GJINI - Administration of Medicinal Plants – Jak Gjini, Lezhe 2018.

UNDP Albania – Kukes District Council Kukes District Development Strategy 2012-2016.

UNDP Albania – Lezha District Council Lezha District Development Strategy 2012 -2016

SNV, ProMountain Program, 2011, Natural potentials of aromatic medicinal plants in Albania

RAPA Regional Administration of Protected Areas - Kukes 2018

DLDP – Kukes Municipality: General Local Plan of Kukes Municipality.

DLDP - Tropoja Municipality: General Local Plan of Tropoja Municipality

DRB - Statistical Yearbook of the Regional Directorate of Agriculture and Food Kukes

8. APPENDIX A - BUSINESSES IN ALBANIA

No.	Business Name	Contact	Location	Activity/number of employees	Does it collect FFs (yes, what/no)	Where are the products sold
Lezha						
1	UJKA	0692426938 Nikolin Ujka	Balldre, Lezhe	Collects medicinal plants: Sage, thyme, breckland thyme 2 full-time employees and 4 seasonal workers	Juniper, crab apple, hemp, wild crapemyrtle, wild pomegranate, pine cones	Primarily in domestic market
2	ÇUPI	0683393726 Prengë Çupi	Ishull Lezhe	Collects medicinal plants: Sage, thyme, breckland thyme, pine needles, mellage, teucrum, hypericum perforatum, laurel, etc. 2 full-time employees and 5 seasonal workers	Juniper	Abroad
3	KOLNDREU	Gjeto Kolndreu	Torovice	Collects medicinal plants: Sage, thyme 1 full-time employee and 3 seasonal workers	No	Domestic market
4	PALI	0692621637 Ludovik Pali	Balldre	Collects medicinal plants: Sage, thyme, clover 1 full-time employee and 3 seasonal workers	No	Domestic market
5	IVANAJ	0694428300 Enxhell Ivanaj	Ishull Lezhe	Collects medicinal plants: Sage, thyme, breckland thyme 1 full-time employee and 4 seasonal workers	No	Domestic market

Mirdita						
6	PERSHQEFA	0693192762 Nikoll Pershqefa	Rreshen Mirdite	Collects medicinal plants: plantago, thistle, laurel, hypericum perforatum, breckland thyme, althea 1 full-time employee and 4 seasonal workers	Yes, blueberries, juniper (retail)	Domestic market
7	LIKA	Gjelina Lika	Rreshen Mirdite	Many types of Mirdita medicinal plants 1 full-time employee and 3 seasonal workers		Domestic market
Kurbini						
8	Filipi Co	0682021352 (Filip Gjoka)	Gjorme, Kurbini	Collects medicinal plants: Sage, all medicinal plants of North Albania 160 full-time employees and 40 seasonal workers	All wild berries, such as blueberries	Foreign market, Europe, USA
9	BOCI	0685876173 Mark Boci	Mamurras Kurbini	Collects medicinal plants: Sage, thyme, breckland thyme, white althea, hypericum perforatum 2 full-time employees and 3 seasonal workers	No	Domestic market
10	AGROHERBAL	Arifi Daci	Mamurras	Collects medicinal plants: Many secondary medicinal plants, like nettles, berries, hypericum perforatum, althea, tecurum etc. 90 full-time employees and 30 seasonal workers	Yes, all wild berries, such as blueberries.	Domestic market

Kukes						
11	HALLAÇI	0692358705 Shkelzen Hallaci	Kukes (Z.Indu- striale)	Collects medicinal plants: Sage, thyme, black juniper, cowslip 2 full-time employees and 6 seasonal workers	All wild berries, crab-apple, dog-rose and blueberries	Domestic market. Licensed for the foreign market
12	TAHIRI	0682019183 Qemal Tahiri	Kukes, Parku i Ri	Collects medicinal plants: Sage, thyme, black juniper, cowslip. 2 full-time employees and 4 seasonal workers	All wild berries, crab apple, blueberries, blackberries	Domestic market
13	SHEHU	0682290292 Eduart Shehu	Kukes (Nj.A .Bicaj)	Collects medicinal plants: Sage, thyme 2 full-time employees and 4 seasonal workers	Crab apple, blueberries, blackberries	Domestic market
14	YLBERI	0692796645 Ylber Shehu	Kukes (Nj.A. Bushtric	Collects medicinal plants: Sage, thyme, black juniper, cowslip. 1 full-time employee and 4 seasonal workers	Crab apple, blueberries, blackberries	Domestic market
Tropoja						
15	ÇELA	0682659512 Albert Çela	Tropojë (Sopot)	Collects secondary medicinal plants, sage, etc. 2 full-time employees and 6 seasonal workers	Chestnut, crab apple, wild juniper	Domestic market
16	BERBATI	0686264859 Altin Berbati	Tropoje	Collects all medicinal plants, sage, thyme, dog-rose 2 full-time employees and 5 seasonal workers	Chestnut, crab apple, blackberry, blueberry, wild juniper	Domestic and foreign market
17	MILUSHI	0686412033 Valter Milushi	Tropoje	Collects all medicinal plants 2 full-time employees and 5 seasonal workers	Chestnut, crab apple, blueberry, wild juniper	Domestic market
18	ZENELI	0682006768 Altin Zeneli	Tropoje	Collects all medicinal plants 2 full-time employees and 3 seasonal workers	Chestnut	Domestic market

9. APPENDIX B - BUSINESSES IN KOSOVO

LIST OF BUSINESSES IDENTIFIED IN KOSOVO				
Business Name	Location	Activity	Exporter	Contact
BIOTICA	Bllaca - Suhareka	<p>Processing, cultivation, packaging and sale of teas such as: chamomile, ginger, sage, elder, cranberry and blueberry.</p> <p>The business aims to develop the processing activity of essential oils.</p> <p>The business has 2 registered employees and 4 seasonal workers during the months of May-November.</p>	The business sells its products in the local market, mainly pharmacies and other points of sale.	<p>Owner: Hysni Guraziu</p> <p>Tel: +383 44 537-708</p> <p>+383 44 945 743</p> <p>E-mail: biotica@hotmail.com</p>
Hit Flores	Dragash	<p>It is one of the largest processors and exporters of non-wood forest products in Kosovo.</p> <p>Currently, has contracts with 150 families, which use an area of over 37,000 hectares to collect non-wood forest products.</p> <p>The business has 150 hectares for the cultivation of raspberries and strawberries. There is a total of 20 full-time employees throughout the year, while there are 70-100 seasonal workers.</p> <p>The business cooperates with about 4,000 harvesters from all over Kosovo.</p>	Direct exporter to European countries (Germany)	<p>Owner: Arafat Berisha</p> <p>http://hitflores.com</p> <p>hitflores@hotmail.com</p> <p>Tel: +383 44 148 155</p> <p>+383 44 760 782</p>
NTH 2000	Brezne, Dragash	<p>Collection and cleaning of non-wood forest products in the Dragash region.</p> <p>The business has contracts with 40 families. They have 4 seasonal workers during May-November who clean up the collected products and 15 regular collection staff.</p>	Products are collected for export. They are sold at Agroprodukt, Istog.	<p>Owner: Besarb Krasniqi</p> <p>Tel: +383 45 686 844</p>

		It is a new business based in Sharr (Dragash) engaged in the collection, processing and marketing of BIO plants and fruits.		Owner: Ensar Guri http://alko-natura.com
Alko-Natura	Kosavë, Dragash	For now, the company offers over 10 products that grow naturally in the Sharri Mountains. They have 2 full-time employees (family members) and have collaborative contracts with 30 families, which vary depending on engagement and workload.	The business is a direct exporter to EU countries (Germany)	info@alko-natura.com +377 44 408 057 Address: Kosavë, Dragash, Kosovo
Agro Shqiponja	Tërpezë Malisheva	The business is collecting, processing and cultivating aromatic herbs and producing organic seedlings. By 2014 the business started with the cultivation of medicinal herbs. The business has engaged 6 regular employees (with contracts) for the whole year. Approximately 60 families process the produce on their farms, and later sell it to Agro Shqiponja, and they are from different parts of Kosovo.	Products are collected for export. They are sold at Agroprodukt, Istog.	Owner: Shefqet Krasniqi Tel: +377 44 403 715
Natural Frut	Budakovë Suharekë	Collects, processes and sells processed herbal products such as mushrooms, rhizomes, wild blackberry, wild blueberries, wild cranberries, wild strawberries, black and red juniper, cowslip, elder. Staff: 10-15 seasonal workers of mushrooms (women) at the workshop - collection point, mostly family members. The business has 25 collection points across Kosovo, where up to 500 families are engaged around Kosovo	Products are collected for export. They are sold at Agroprodukt, Istog.	Owner: Hamit Buzhala Tel: +377 44 206 324

Fito Trade SHPK	Shajne - Dragash	<p>Collects, processes and sells processed herbal products such as mushrooms, rhizomes, wild blackberry, wild blueberries, wild cranberries, wild strawberries, black and red juniper, cowslip, elder.</p> <p>The business has 4 regular and 8 season employees, and 25 collection points, up to 500 families harvesting produce.</p>	Products are collected for export. They are sold at Agroprodukt, Istog.	<p>Owner: Elvis Osmani Tel: +386 49 130 572 osmanosman99@yahoo.com</p>
Malësia Herbs	Radoste Rahovec	<p>Malesia Herbs has been developed within Tradita LLC. The business engages in collection, cultivation, drying and sale of teas and herbs.</p> <p>Permanent staff are 7 people over the 12 months, while seasonal workers are 7-8, depending on the needs.</p> <p>In the framework of cooperation with Malesia Herbs, 7 farmers/families have been equipped with dryers to collect and dry the produce they harvest. The business has long term contracts with 40 families.</p>	Products are collected for export. They are sold at Agroprodukt, Istog.	<p>Owner: Armend Kastrati malesiaherbs@gmail.com Tel: +377 44 185 331</p>
Bio Farm "Lorena"	Prizren	<p>Collection, drying, processing and packaging (for export) of forest fruits and medicinal herbs. The business also engages in cultivating of blackberries.</p> <p>Medicinal and aromatic plants as well as dried fruits are mainly used in the pharmaceutical, food and cosmetics industries.</p> <p>The business operates within the poultry farm of the same owner.</p>	Products are collected for export. They are sold at Agroprodukt, Istog.	<p>Owner: Qazim Morina +383 44 833-990 lorenabiofarma@gmail.com</p>

10. APPENDIX C - METHODOLOGY

Market Research in the Field of Collection and Processing of Forest Fruits and Medicinal Plants in Albania and Kosovo

Based on the terms of reference, this survey will be focused on:

- 1)** Identification of enterprises, employers or collection points that deal with forest fruits and medicinal plants in the territory of Albania-Kosovo border area;
- 2)** Needs of employers in the field of collection and processing of forest fruits and medicinal plants, to reduce gaps between supply and demand;
- 3)** Development potential in the field of collecting and processing forest fruits and medicinal plants in the territory of the border between Albania and Kosovo.

The methodology to be applied in carrying out this survey involves a variety of techniques, as follows:

- 1)** Review of literature (research, field reports, technical reports) and existing data specific to each region, including the potential for developing and extending the activity of collecting and processing these products;
- 2)** Mapping of businesses of respective regions - Direct meetings with relevant municipal institutions, non-governmental organizations (NGOs), forest directorates, regional environmental agencies, business centers and other interest groups involved in development projects of this sector.
- 3)** On-site visits, conducting in-depth, semi-structured interviews with collectors and processors of medicinal plants, including large businesses and major collection points of the respective regions;
- 4)** Processing and analysis of data;
- 5)** Drafting the report on the findings;
- 6)** Final Report (after comment consolidation by SWEI project representatives).

11. APPENDIX D - QUESTIONNAIRE

Presentation of interviewer,

Hello, my name is _____ (interviewer's name) and I am engaged by EPAK/ISI within the SWEI project. SWEI - "Skilled Workforce for Economic Integration", a project of the cross-border program Albania-Kosovo, funded by the European Union. The project is designed to promote cooperation, exchange of experiences, improve the efficiency and quality of Employment Services and Vocational Training Centers towards Sustainable Employment of Jobseekers and Youth Training to Support Socio-Economic Integration in the Albania-Kosovo Cross-Border Region.

We are conducting some interviews to identify the enterprises, employers and collection points of forest fruits and medicinal in the Albania-Kosovo border area. The purpose of these interviews is not only to identify businesses, but also to identify the needs of employers in this field, with particular emphasis on reducing the gap between supply and demand. Moreover, the project is interested to learn more about the development potential in the field of collecting and processing forest fruits and medicinal plants in the Albania-Kosovo border area.

The findings of this survey will support the purpose of the project. I must explain that I need to keep detailed notes on your name, position in the institution, and your contact details, which will be shared with the project.

1. Info on the business:

1. Business Name:
2. Name of interviewed person:
3. Position of interviewed person within the company:
4. Telephone number:
5. Email address:
6. Year of establishment:
7. Number of employees:
 - 7.1 Number of permanent/full time employees;
 - 7.2 Number of temporary workers
 - 7.3 Number of seasonal workers

2. Have you increase/lowered the number of employees this year?

3. How is business performance in recent years?

4. What are the strengths/advantages of your business compared to other businesses in this field?

5. What are the challenges you face as a business?

(Read: For example: There is no market demand for our produce, the price has dropped due to the high competition, the import of cheap products in local markets, customs barrier (if any, what are they?), etc.)

6. What difficulties has encountered your business (business management)?

(Read: For example, staff recruitment difficulties, staff needs additional training to work in this sector, difficulties in planning and marketing the business)

7. What are your difficulties in collecting, storing and processing your products?

(Read: For example, lack of workforce in product collection, lack of equipment to properly store products and to process them, electric power problems, etc.)

8. What are the strengths or opportunities for developing this business?

(Read: For example, stable political and social conditions, the potential for this business field to grow even more in the future, the workforce - the local population is interested in working with these products, etc.)

9. Do you think there is potential for growth in the forest fruits and medicinal business in the future?

10. With how many households (produce harvesters) do you cooperate during the year? How much do you think can a family earn (over the year) if they engage in harvesting such produce and selling it to the collection points?

11. What are the main needs in your business?

(Read: worker training (if yes, what kind), addition of equipment for collecting/preserving/processing of produce etc.)
