

RisiAlbania is a project of the
Swiss Agency for Development
and Cooperation SDC



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC



In partnership with:



Implemented by:



HELVETAS



PARTNERSALBANIA
FOR CHANGE AND DEVELOPMENT



TABLE OF CONTENTS

1 Purpose	3
2 Context	4
3 Solution Overview: A Reliable Approach to Sustainable Sourcing	6
4 Market Aspects	10
5 Business Level Opportunities	11
6 Success Story	14
7 Call to Action	15

Author: ERGENT PIRE
Intervention Manager, Helvetas

This document has been produced by RisiAlbania. Risi is a youth employment project of the Swiss Agency for Development and Cooperation SDC, implemented by Helvetas and Partners Albania. The views and conclusions contained here do not necessarily reflect neither those of the Swiss Government nor the Swiss Agency for Development and Cooperation SDC.

August 2025

Purpose

The purpose of this business case is to demonstrate the benefits of adopting traceability systems within Albania's fruits and vegetables (F&V) and medicinal and aromatic plants (MAPs) sector, with a particular focus on the implementation of FarmForce, a globally recognized platform and introduction of a local solution developed by Helius System. FarmForce has a proven track record of supporting companies in developing countries to access high-value international markets by ensuring transparency and compliance across the supply chain.

Helius Systems, an Albanian tech company, with the support of the youth employment project of Swiss Agency for Development and Cooperation SDC, implemented by Helvetas, developed a traceability solution that is tailored to the fruits and vegetables and MAPs sector and represents the first local effort in this field. While Helius Systems shows promise and potential for adaptability, it is still a new market entrant, and currently there is insufficient data to evaluate its financial impact or draw strong conclusions about long-term benefits.

As the global market becomes more competitive and export requirements grow increasingly stringent—particularly in the areas of traceability, sustainability, and regulatory compliance—it is essential for Albanian F&V and MAPs companies to adopt modern digital tools. Traceability lies at the heart of this evolution, enabling companies to meet buyer and consumer expectations for verifiable, detailed information regarding the origin, quality, and environmental footprint of their products.

A robust system like FarmForce offers an end-to-end solution for managing and tracking production from farm to final product. It enhances transparency, supports compliance with international certifications, and improves operational efficiency across both farming and supply chain processes. With features like real-time data collection, digital record-keeping, and automated reporting, traceability systems significantly reduce the risk of fraud and build trust with buyers.

This business case includes a cost-benefit analysis focused on FarmForce, illustrating how the investment can lead to long-term growth, improved competitiveness, and secure access to international markets. By adopting such technology, Albanian F&V and MAPs companies can elevate product quality, meet global standards, and position themselves for sustainable success.

While this analysis highlights FarmForce due to its maturity and established performance, it also acknowledges the emergence of Helius Systems. Given its early development stage, this document only provides an overview of Helius without detailing financial outcomes, as there is currently insufficient data to conduct a meaningful cost-benefit evaluation.

Context

Albania has a rich history in producing and exporting medicinal and aromatic plants (MAPs). Traditionally, the sector has relied on wild-grown MAPs, but there is a growing shift towards cultivation, which is seen as more sustainable. Export plays a crucial role in the sector, with 95% of MAPs produced being sent abroad. The value chain is dominated by 20–30 large processors and exporters, but the entire process is labour-intensive and supports around 80,000 households, particularly in rural and mountainous areas.

Despite the development and consolidation of the last decade, the MAPs sector remains complex, involving multiple steps from harvesting and cultivation to processing and trade. For many rural families, collecting MAPs is still a key source of income, although fewer families are involved today due to socio-economic changes in mountain areas. Nevertheless, MAPs remain an important part of Albania's economy, accounting for about 12% of the country's agricultural exports. In 2023, according to the Ministry of Agriculture and Rural Development (MARD), Albania exported about €50 million worth of processed and unprocessed MAPs, making it the 16th largest MAP exporter globally.

There is still potential for the MAPs sector to grow. As international demand for transparency increases, businesses that can trace their MAPs back to the source will gain an advantage in premium markets. By using digital tools to document and verify their supply chains, companies can simplify compliance and strengthen their market position. Digitizing processes such as tracking harvests can reduce errors and inefficiencies. This not only improves operations but also helps maintain product quality, increasing revenue and enabling companies to scale more effectively.

In parallel, the fruits and vegetables (F&V) sector has become one of the most dynamic parts of Albanian agriculture. Fresh F&V account for a significant share of agricultural exports—around 25–30% annually—with tomatoes, peppers, cucumbers, melons, citrus fruits, and berries leading the way. In 2023, Albania exported more than €100 million worth of fresh fruits and vegetables, mainly to Italy, Greece, and regional markets, with growing penetration into Central and Western Europe. The sector benefits from Albania's

favourable climate, long harvest season, and proximity to EU markets, which allow exporters to supply products earlier or later than competitors.

The value chain is more fragmented than MAPs, involving thousands of smallholder farmers, but recent years have seen increasing consolidation around larger producers, collection centers, and exporters. The expansion of GlobalG.A.P. certification and group certification schemes has enabled more farmers to meet international standards and supply high-value buyers. Participation in international fairs such as Fruit Logistica has also raised Albania's profile, connecting exporters with European importers and retail chains.

However, the F&V sector still faces challenges. Post-harvest handling, cold storage, and logistics remain underdeveloped, limiting the ability to consistently meet quality requirements. Exporters are under pressure to provide traceability, residue-free production, and year-round reliability, as demanded by EU buyers. Investments in modern greenhouses, irrigation systems, digital traceability platforms, and contract farming models are becoming increasingly important to ensure competitiveness.

Taken together, both MAPs and F&V represent strategic opportunities for Albania. By strengthening compliance with international standards, investing in digitization and traceability, and shifting towards value-added products, exporters can secure a stronger foothold in premium markets and expand their share of Europe's fast-growing demand for sustainable, high-quality agricultural products.



Solution Overview: A Reliable Approach to Sustainable Sourcing

Farm Force

FarmForce is a digital platform that enhances the management of agricultural supply chains, especially in sectors requiring strict traceability and quality control—such as F&V and medicinal and aromatic plants (MAPs). It enables businesses to track products from cultivation through processing and sales, ensuring compliance with international standards, certification schemes, and buyer requirements.

Currently, FarmForce operates across four continents, supporting agricultural operations in 32 countries and 15 languages. It covers 27 crop types and is used by over 1.4 million farmers worldwide. This broad reach makes FarmForce a powerful tool for improving farm management, ensuring product quality, and promoting sustainable sourcing practices.

Key Benefits

- **TRACEABILITY:** Every action in the system is linked to individual farmers and fields, ensuring a clear, traceable path from farm to market.
- **COMPLIANCE:** FarmForce supports certification schemes such as Global GAP and Organic, helping businesses meet high-value market requirements.
- **SUSTAINABILITY:** With over 1.1 million mapped fields, the platform supports environmental monitoring and deforestation tracking.
- **EFFICIENCY:** Real-time data and digital record-keeping improve operational oversight and decision-making.

Support for the F&V and MAPs Sector

In the F&V and medicinal and aromatic plants (MAPs) industry, FarmForce plays a critical role in managing smallholder farmers and aggregators. It simplifies coordination, ensures quality and sustainability at every stage, and supports companies in meeting export requirements.

Key MAPs-specific features include:

- **REAL-TIME PRODUCTION DATA:** Monitor inputs, crop performance, and harvesting activities to improve yields and plan proactively.
- **DETAILED TRACEABILITY:** Products can be traced back to their origin, a must for international buyers who demand transparency.
- **CERTIFICATION READINESS:** Helps businesses comply with certification standards, opening doors to premium markets.
- **IMPROVED MARKET ACCESS:** By enhancing traceability and compliance, FarmForce enables MAPs businesses to become more competitive and trusted by global buyers.

Driving Impact in Albanian companies

For Albanian companies, FarmForce delivers a clear competitive edge in the F&V and MAPs market. By strengthening traceability and compliance, it enhances the company’s reputation as a reliable supplier of high-quality products. This not only helps build trust with buyers but also attracts investment and creates opportunities for market growth. FarmForce contributes to elevating Albania’s image as a country that upholds high standards in agricultural practices and exports.

How FarmForce Works: Core Components and Features

- **UNIQUE FARMER ID:** Each farmer receives a unique identifier, with detailed profiles including name, birthdate, gender, contact info, photos, and more.
- **FIELD LINKAGE:** Farmers are associated with one or more fields, each assigned a unique Field ID. Field data can be imported via shapefiles or mapped directly using the mobile app.
- **FARMER DASHBOARD:** View a complete picture of a farmer’s activities, including mapped fields, crop cycles, trainings, and payments.
- **FARMER ACTIVITY TRACKING:** Easily manage seasonal engagement—mark farmers as inactive without deleting their records.
- **TAGS:** Quickly identify farmers by specific characteristics, such as participation in programs like Rainforest Alliance.

- **GROUPS:** Organize farmers into groups linked with specific staff, campaigns, or surveys for efficient management.
- **NAMED ATTRIBUTES:** Upload custom data fields required by clients, such as yield history or plot age.
- **FIELD & INFRASTRUCTURE MAPPING:** Map both agricultural and non-agricultural landmarks (e.g., forests, schools) near managed farms.
- **GPS FIELD MAPPING:** Create and store GPS-based polygons for fields to track exact locations and spatial relationships.

Helius Systems – A Local Solution for Food Safety and Traceability

While internationally recognized platforms like FarmForce offer proven solutions for supply chain traceability, Albania has also seen the emergence of innovative local systems tailored to the country’s specific context. One such solution is developed by Helius Systems with the support of the youth employment project of Swiss Agency for Development and Cooperation SDC, implemented by Helvetas and Partners Albania (RisiAlbania)—a pioneering Albanian technology company offering a digital traceability platform focused on food safety and supply chain transparency, particularly relevant to the Fruits and Vegetables and Medicinal and Aromatic Plants (MAPs) sector.

Helius’ Food Safety and Traceability solution is designed to help businesses monitor, manage, and document the journey of their products from origin to final destination. Though still new in the market and lacking large-scale financial performance data, this system represents a promising domestic alternative to international platforms.

Key Features and Benefits



1

Digital Records and End-to-End Visibility.

Helius enables electronic tracking of products throughout the supply chain, providing a clear, real-time picture of each step in the production and distribution process.



2

Data Security and Integrity.

The platform uses secure, tamper-resistant technology to maintain the accuracy and authenticity of records, enhancing trust and reducing the risk of fraud.



3

Faster Incident Response.

In the event of food safety issues, the traceability system helps quickly identify the source of contamination, enabling swift action to minimize health risks and prevent further spread.



4

Regulatory Compliance.

Helius is built to support compliance with both Albanian and European Union food safety regulations, making it suitable for companies targeting domestic and international markets.



5

Enhanced Product Quality and Accountability.

By documenting each stage of the production chain, the system encourages businesses to uphold higher standards and fosters a culture of transparency and quality assurance.

Digital Traceability: Why Does It Matter?

- **NECESSARY INSIGHTS.** With large farming operations come many farmers. In order to bring each field, farmer, or product to scale, accurate farm-level data is needed as without such insights there is no traceability.
- **QUALITY DECISION MAKING.** With digitalised and streamlined processes along the journey of the product, starting at the farm-level, with accurate figures in online databases will increase the ability for risk mitigation and to improve profit margins.
- **GREATER BRAND VISIBILITY.** All along the supply chain and to the end consumer, insight and visibility into farmers' and fields' operations and traceability that is tied to GPS Mapping is becoming more and more sought after.
- **COMPLIANCE WITH NATIONAL REGULATION FOR TRACEABILITY.** Implementation of traceability systems such as FarmForce or the one developed locally by Helius Systems, put Albanian companies ahead in the preparation to comply with the new traceability requirements of the Ministry of Agriculture and Rural Development laid down in the Directive No.15, Date 10.04.2025, on: "On the indicators or signs that identify the lot to which a food product belongs". This directive will take effect on January 1, 2026, and now is the time for Albanian companies to begin preparing to comply with it.

IMPLEMENTATION ROADMAP



Needs Assessment & Goal Setting

- Analyze current system
- Identify gaps
- Define objectives



Map the Supply Chain

- Identify key stages and data capture points



Select a Traceability Solution

- Choose suitable off-the-shelf or custom-built system



Digital Infrastructure Setup

- Install hardware
- Ensure cloud storage
- Provide connectivity



Train Staff & Stakeholders

- Conduct training sessions
- Establish SOPs



Data Collection & Integration

- Begin real-time data capture
- Integrate with systems



Testing & Pilot Phase

- Validate accuracy
- Usability
- Get feedback



Certification & Market Leverage

- Obtain certifications
- Market traceability to buyers

Market Aspects

The global market for medicinal and aromatic plants (MAPs) was valued at \$9–10 billion in 2023 and is projected to grow at 6–7% annually, reaching \$14–16 billion by 2030. This growth will be driven by the increasing demand for natural ingredients in pharmaceuticals, cosmetics, and food products, as well as the rising consumer preference for organic and sustainable products. Albanian exporters are well-positioned to capitalize on these trends, particularly in high-value markets such as Germany, the U.S., France, and Italy, which are among the world's largest importers of MAPs. Today, a substantial number of international companies already buy MAPs produced in Albania.

A significant growth driver is the increasing awareness of the health benefits of MAPs such as sage, oregano, chamomile, and thyme, which are widely used in herbal teas, supplements, and functional foods. The pharmaceutical and cosmetic industries are also seeing rising demand for MAPs, particularly for essential oils, herbal extracts, and dietary supplements. For Albanian exporters, compliance with organic certification and international quality standards is critical for gaining and maintaining access to premium markets. The adoption of traceability systems like FarmForce is becoming increasingly important for meeting global buyer expectations.

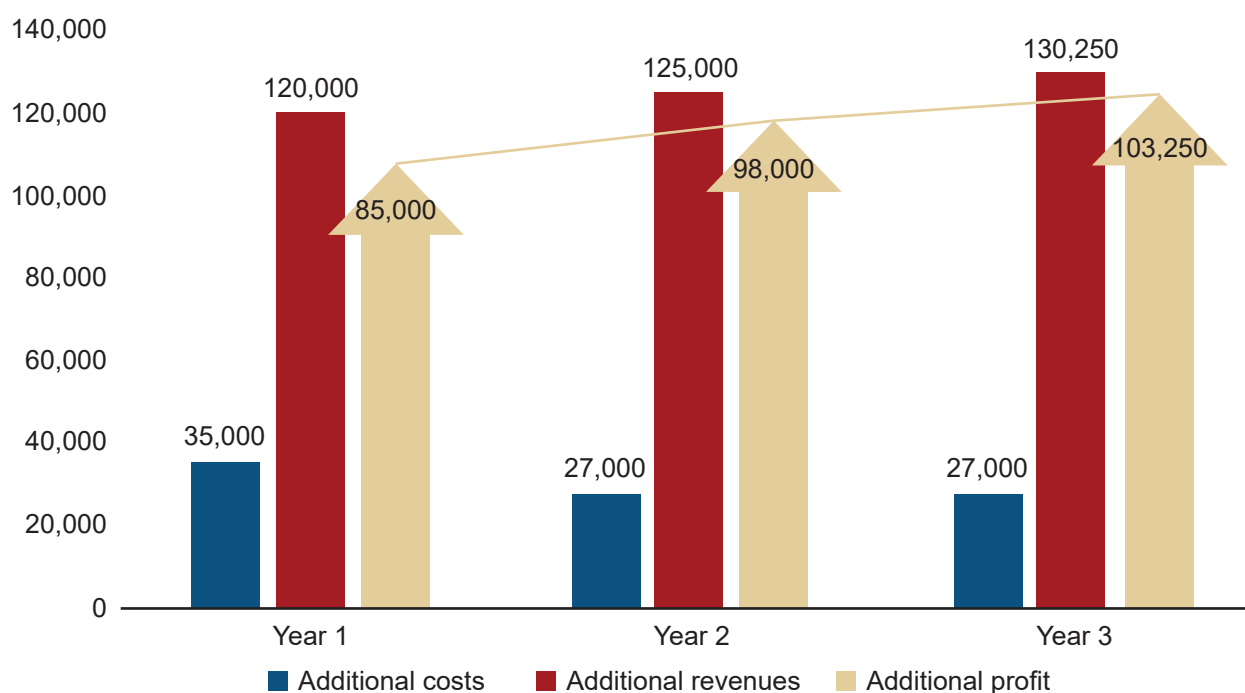
While Albanian processors and exporters face competition from neighboring countries with similar climates, and countries like Spain and Morocco, its rich biodiversity and high-quality herbs provide a competitive edge. By investing in cultivation and focusing on value-added products such as essential oils and retail-ready packaged goods, Albanian exporters can further differentiate themselves. With the growing use of MAPs in nutraceuticals and pharmaceuticals, they have significant potential to expand their market share. At the same time, the global fresh fruits and vegetables (F&V) market represents a much larger opportunity. Valued at over \$1.3 trillion in 2023, it is expected to continue growing at around 5% annually through 2030, driven by rising global consumption of fresh and healthy foods, urbanization, and the increasing demand for year-round supply in developed markets. The European Union alone imports more than €20 billion worth of fresh fruits and vegetables annually, with Germany, the Netherlands, France, and Italy being major entry points and consumers.

For Albania, the proximity to EU markets and competitive harvest calendars create favorable opportunities to expand F&V exports, especially in products such as tomatoes, peppers, cucumbers, melons, citrus, and berries. The country has already made progress in aligning with EU quality and food safety standards, and the expansion of GlobalG.A.P. certification and group certification schemes has enabled more producers to access premium buyers. Participation in international fairs such as Fruit Logistica in Berlin has further increased Albania's visibility and connected exporters with global buyers. To remain competitive, Albanian F&V exporters must strengthen post-harvest handling, cold storage, logistics, and branding, as buyers increasingly demand reliability, traceability, and consistent quality. Investments in sustainable production methods and contract farming models are also becoming crucial to secure stable supply for international partners. With growing demand in regional and EU markets for organic, residue-free, and sustainably produced fresh fruits and vegetables, Albania has significant potential to scale up exports and capture a larger share of the high-value market segment.

Business Level Opportunities

In the competitive landscape of international trade, improved traceability is essential for Albania's F&V and MAPs processors and exporters to access and keep momentum in high-value markets and benefit from the expected 6-7% (MAPs) and even higher for F&V, as annual market growth in the next 5-6 years. Buyers increasingly demand clear traceability to ensure sustainable practices. FarmForce addresses this by offering a secure system that records every step of the supply chain, facilitating compliance with EU and global standards. This level of traceability also mitigates risks, allowing companies to quickly manage potential contamination issues leading to product recalls, thus protecting their brand reputation and resulting in higher profit margins.

Figure 1: Financial benefits of implementing Farm Force



A clear path to implementing FarmForce is already established, with a successful example in Albania to guide the way. The investment required is relatively low, and the return on investment (ROI) is quite satisfactory, making the rewards well worth the effort.

The financial benefits are evident. FarmForce enhances overall product quality, reduces losses and product recalls, streamlines certification processes, and increases exporters' operational efficiency. These improvements directly lead to significant financial gains.

Table 1: Financial benefits of FarmForce Implementation

Cost items*	Year 1	Year 2	Year 3
Software licensing fee (annual)	4,000	4,000	4,000
Pre-audit and audit fees	4,000	4,000	4,000
Consulting cost for implementation (350 farmers network)	8,000	6,000	5,000
Additional labour costs	10,000	11,000	12,000
Yearly maintenance fee (3-4 users)	1,000	1,000	1,000
Hardware costs (tablets, smartphones)	2,000	0	0
Training and Onboarding	5,000	0	0
Additional costs (internet, data, etc)	1,000	1,000	1,000
Total implementation costs	35,000	27,000	27,000
Benefits (additional turnover due to FarmForce implementation)			
Annual Turnover 2023	2,000,000	2,100,000	2,205,000
Expected turnover increase due to Farm Force	100,000	105,000	110,250
<i>Other Financial benefits</i>	<i>20,000</i>	<i>20,000</i>	<i>20,000</i>
- Reduction in Product Loss & recalls	10,000	10,000	10,000
- Streamlined Certification and Compliance	5,000	5,000	5,000
- Improved supply chain efficiency	5,000	5,000	5,000
Total financial benefits	120,000	125,000	130,250
Additional revenues	85,000	98,000	103,250
Return of Investment (ROI)	242.9%	363.0%	382.4%

In this analysis, we examine the financial impact of implementing FarmForce for a small to medium-sized MAPs exporter with annual sales of EUR 2 million. Using FarmForce can increase sales by at least 5%, while also reducing production losses and recalls, simplifying the certification process, and improving supply chain efficiency. The investment in FarmForce provides a return on investment (ROI) of 2.42 in the first year, 3.63 in the second year, and 3.82 in the third year, meaning that for every Euro invested, the exporter earns at least EUR 2.42 in the first year and 3.82 in the third year. So, once the processes are streamlined and the team gains experience in navigating the Farm Force, the return on investment gets higher as a result of higher additional incomes generated and lower costs of system in the coming years. The consulting cost are reduced in the coming year, as the system is already in place and the inhouse team gains experience, and hardware and training/onboarding costs are only necessary during the first year (we are considering a constant number of farmers). There's a clear path to embracing traceability with Farmforce which is already proven to be successful both operationally and financially for exporters.

If you want to start with digital traceability, it's important to define the step by step process



Success Story

RisiAlbania partnered with Albanian Herb, one of the leading MAPs exporters in Albania to pilot the implementation of the Farm Force in their company and group of farmers of oregano.

RisiAlbania's partnership with Albanian Herb to pilot FarmForce within their network marks a significant step for Albania's Medicinal and Aromatic Plants (MAPs) sector. By implementing FarmForce—a digital solution for managing and monitoring farming activities—Albanian Herb aims to streamline the traceability and quality assurance of Albanian oregano. This initiative not only strengthened the production and the sustainability but also opened the door for branding and promoting Albanian oregano as a high-quality product in the U.S. market.

Albania is already recognized in the U.S. for its high-quality sage exports, and the implementation of the Farmforce help the Albanian companies to be compliant with EU regulations and to position Albanian oregano alongside sage as a premium herb with unique characteristics. This initiative showcased the MAPs sector's potential to diversify and expand its exports, enhancing Albania's reputation for high-quality, organically sourced herbs on a global scale

The pilot implementation with Albanian Herb, demonstrated significant improvements in traceability, operational efficiency, and certification management. The company implemented FarmForce with 350 farmers and was able to create 20 new jobs in their network of cooperation.

By using FarmForce the company achieved full traceability of products sourced from 350 farmers. Certification processes were streamlined, reducing audit preparation time by 50%. The company recorded a 20% improvement in harvest planning and coordination, leading to reduced post-harvest losses. Better traceability and coordination with farmers led to increased product quality and quantity resulting in EUR 60K additional revenues from the 600 tons of oregano production. Also, they were able to pay farmers a premium price, generating about EUR 40K at farm level.

Call to Action

To stay competitive in the global market and boost profits, Albanian F&V and MAPs exporters need to consider investing in digital traceability systems. Internationally renowned digital tools like FarmForce are highly recommendable. If you find Farm Force too complicated and expensive, reach out to Helius Systems based in Tirana, Albania and try to start with their traceability solution. These tools help meet the growing demand for traceability, compliance, and efficiency. Interested companies can start by testing FarmForce on a small part of their supply chain to experience its benefits before expanding.

Adopting FarmForce isn't just about going digital; it's a smart move for long-term success. By improving traceability and streamlining operations, F&V and MAPs exporters can open up new market opportunities and strengthen their position in the global market.

RisiAlbania is a project of the
Swiss Agency for Development
and Cooperation SDC



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC

BUSINESS CASE

UNLOCKING GROWTH
IN ALBANIA'S F&V AND MAPs SECTORS
WITH TECH-DRIVEN TRACEABILITY

In partnership with:



Implemented by:



HELVETAS



PARTNERSALBANIA
FOR CHANGE AND DEVELOPMENT