

Enhancing Agricultural Market Systems

A Case Study on Contract Farming in PPSE



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1. EXECUTIVE SUMMARY

The Promoting Private Sector Employment (PPSE) project, funded by the Swiss Agency for Development and Cooperation (SDC), introduced contract farming as a market-driven solution to address the challenges of Kosovo's Food and Natural Ingredients (FNI) sector. Focusing on improving productivity, securing market access, and building strong value chains, the intervention aimed to foster sustainable growth for smallholder farmers and agribusinesses. Guided by the Market Systems Development (MSD) approach, PPSE facilitated partnerships between farmers, collection centers, and processors, ensuring mutual benefits through written agreements.

Key stakeholders, including farmers, collection centers, and processors, played vital roles in the success of the intervention, helping increase efficiency and production. The strategy included pre-agreed contracts, technical support, and access to inputs, allowing for flexibility in response to market conditions. The project successfully expanded from a 2014 pilot to involve over **1,400 farmers** and **55 small and medium agribusinesses** by 2024, covering **2,000 hectares** of farmland.

Challenges included farmer unpredictability in meeting contract terms and stakeholder resistance to adopting the model, while opportunities lay in expanding contracted production and leveraging export markets, especially in the EU. The model also demonstrated resilience during the COVID-19 pandemic, with steady production supported by collection centers and adaptive management strategies.

PPSE's facilitative role on capacity building, strong partnerships, and embedded support services (e.g., inputs, machinery, and technical advice) through its partners has been essential to adapt the business model and scale it up. The model's sustainability is highlighted by the increasing number of contracted farmers and the respond from the interconnected market such as contract financing. As the development of the sector continues, digitalization, mechanization, and crop insurance will be key areas of focus, aiming to enhance productivity and ensure long-term growth in Kosovo's FNI sector.

The purpose of this paper is to capture and reflect on the experiences, results, lessons learned, and sustainability of the contract farming model from 2014 to 2024. The insights presented are based on the project's practical experiences over this period. Partners, donors, and other programs planning to implement similar projects in the future can leverage these findings to inform the design and execution of future initiatives.

2. INTRODUCTION

Context and Background

Kosovo's agricultural sector is a key contributor to the economy, accounting for **approximately 10% of GDP** and providing livelihoods for a large portion of the rural population. With 38% of the country's land dedicated to agriculture, the sector includes a variety of crops such as wheat, corn, vegetables, and fruits, as well as livestock farming. However, Kosovo's agriculture is largely characterized by smallholder farms, fragmented land ownership, traditional farming methods, and a lack of access to modern technologies.

The **Food and Natural Ingredients (FNI)** sector in Kosovo is a vital component of the country's agricultural landscape, focusing on the production, processing, and marketing of food products and natural ingredients. This sector includes a diverse range of activities, from cultivating crops such as fruits and vegetables to processing raw materials for both domestic consumption and export. The FNI sector has significant potential for growth, driven by increasing consumer demand for quality products and the country's rich agricultural resources. However, it also faces challenges, including fragmented supply chains, limited access to modern technologies, and inadequate market linkages. Efforts to enhance the sector's competitiveness are underway, with initiatives aimed at improving agricultural practices, fostering collaboration among stakeholders, and promoting sustainable production methods.

To address these challenges within the FNI sector, there is a pressing need for **market-driven solutions** that can foster sustainable agricultural development. Solutions that focus on improving productivity, expanding market access, and building strong value chains are essential for ensuring the sector's growth.

PPSE's Focus: Contract Farming as a Solution

Kosovo is generally characterized with small sized farms, which can be either subsistence farms or semi-commercial. Before 2013, the semi-commercial vegetable farmers were oriented mainly towards producing for the fresh market. There were few links with the processing industry, the interaction occurred mainly at the final market – with no long term or contracted cooperation. On the other hand, processing companies and collection centres in Kosovo were operating with low capacity utilization due to low and inconsistent supply of primary production. Furthermore, domestic production of vegetables was mainly in varieties that are more suitable for the fresh market. To address this, PPSE started the 'Contract Farming' intervention in 2014 with the aim of increasing the primary production that flows from farmers to collection centres to processors in Kosovo

Contract farming is a model where farmers and buyers (such as processors or collection centers) enter into pre-agreed contracts for the production and supply of agricultural products. Buyers often provide inputs such as seeds and/or seedlings, fertilizers, and technical assistance to ensure quality and consistency, while farmers benefit from a guaranteed market and stable income.

Advantages of Contract Farming

- Farmers benefit from **better production** planning, increased productivity, secure markets and reduced upfront costs due to embedded services
- Contractors can expand their markets- both **domestic and export**- thanks to reliable inputs
- Contractors, mainly processors, improve their final products through **value-added services** and receiving tailored products
- Collection centers ensure a consistent and reliable supply, meeting the demands of processors, exporters and retailers

Disadvantages of Contract Farming

- Contract farming often creates an **unequal power dynamic**, with companies exerting greater influence over farmers, which can lead to exploitation and unfair contract terms.
- Farmers may face **financial risks**, if they are required to invest in inputs and production without guaranteed returns
- The model can lead to **over-dependence** on a single buyer, making farmers vulnerable to market fluctuations
- There is a risk that contract farming may prioritize **profit over sustainability**, encouraging practices that are unsustainable

PPSE's introduction of the contract farming model aims to bridge the gap between farmers and buyers by creating formalized and reliable relationships that ensure mutual benefits. Farmers benefit from the resources and support needed to **increase productivity**, while contractors are assured of consistent, high-quality supplies of **raw materials**. Within the case of Kosovo, the physical, social and market environments are conducive to promote well balanced and efficiently managed contract farming model. The figure below, depicts the key stakeholders and the value chain within the context of the project.

MSD Approach: Guiding PPSE's Interventions

PPSE's interventions are guided by the Market Systems Development (MSD) approach, which seeks to create sustainable and scalable economic development by fostering market-driven solutions. The MSD approach focuses on addressing systemic constraints in markets, enhancing the competitiveness of smallholder farmers, and encouraging private sector actors to take on a more prominent role in agricultural development.

In the context of contract farming, the MSD approach enables PPSE to facilitate market linkages that work for both farmers and businesses, ensuring that the relationships formed are sustainable in the long term. By working with multiple stakeholders, including farmers, SMEs, and buyers, PPSE ensures that market dynamics are strengthened, helping the agricultural sector grow in a way that supports rural livelihoods and promotes economic development.

In addition, the MSD approach emphasizes adaptation and learning, allowing PPSE to respond to challenges in a timely manner and adjust its interventions as necessary. This adaptability is crucial in managing unpredictable market behaviors and fostering resilience among market actors.

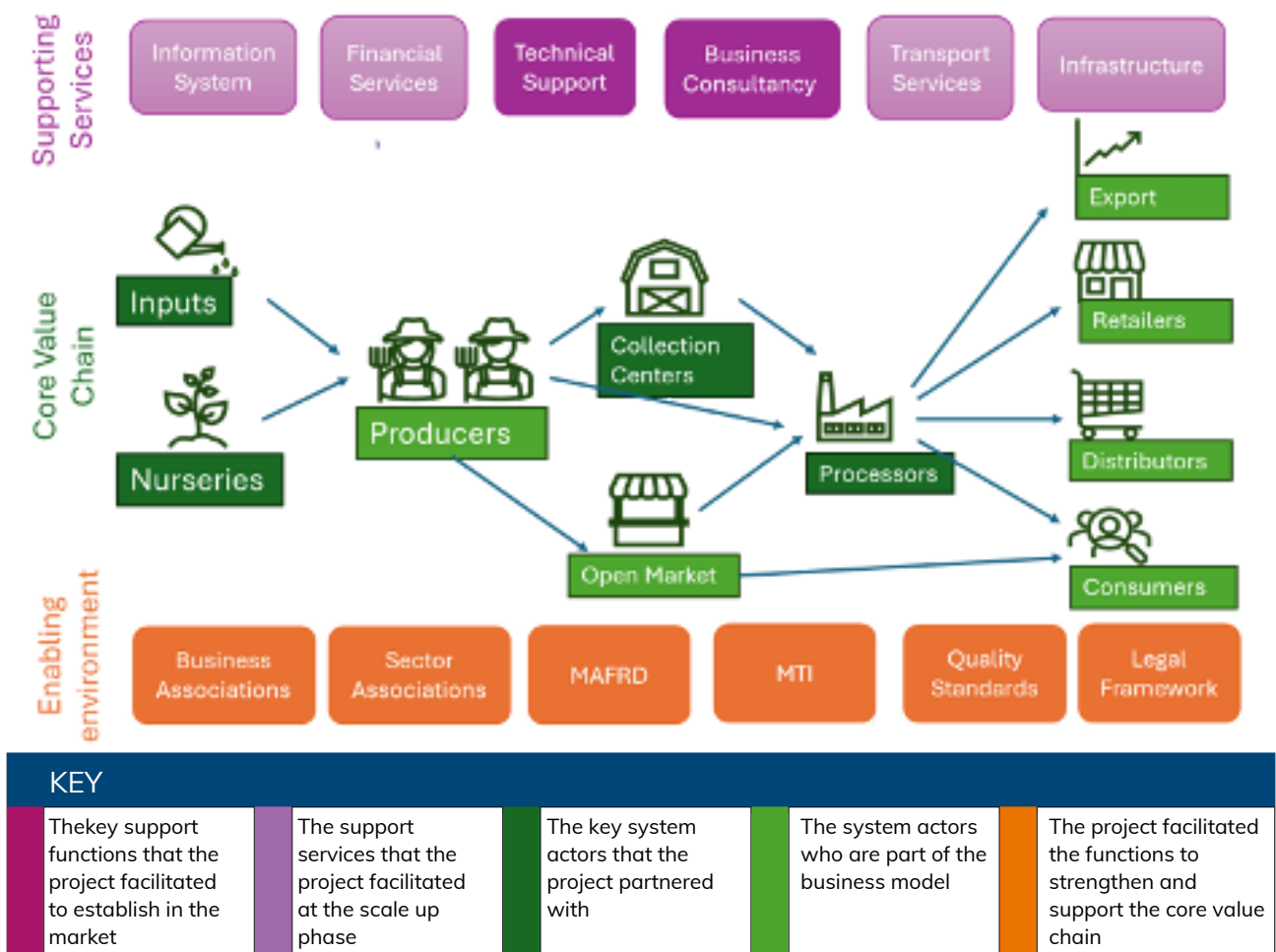


Figure 1: Value chain of the FNI sector

3. STRATEGIC DESIGN OF CONTRACT FARMING INTERVENTION

Implementation Strategy: Designing and Adapting to Local Market Conditions

The **contract farming model** introduced by the **Promoting Private Sector Employment (PPSE)** project was designed with a deep understanding of Kosovo's agricultural landscape and the specific challenges faced by smallholder farmers and market actors. The implementation strategy focused on creating **formalized market linkages** between farmers and buyers, offering farmers secure market access and buyers consistent, high-quality agricultural products. The model was tailored to the local context by considering the fragmented land ownership, limited access to finance, and the small-scale nature of most farms in Kosovo.

The strategy centered around developing relationship and trusts which over time evolved into **pre-agreed contracts** that specified terms of production, quality standards, and delivery schedules, providing both parties with predictability and risk reduction. To address the **financial and technical constraints** faced by farmers, contractors (such as food processors and collection centers) provided essential inputs like seeds and/or seedlings, fertilizers, and advisory services on production techniques. The model was adapted to ensure flexibility for farmers to use additional/unused land for contracted products rather than replacing their cash crops allowing for adjustments to understand the buyer needs and production quality. By offering a **mutually beneficial arrangement**, the contract farming model helped enhance trust between farmers and buyers, ensuring the model's sustainability in the long term.

Partnerships and Collaboration: Engaging Key Stakeholders

A critical aspect of the success of contract farming under the PPSE project was the involvement of a wide array of key stakeholders. The partnerships formed through this initiative included:



Farmers: At the core of the model, smallholder farmers were the primary beneficiaries, with relationships designed to ensure they had guaranteed markets for their produce. By participating, they gained access to **stable income** and reduced their exposure to open market risks.



Collection centers: Collection centers have been crucial to the success of the contract farming intervention, acting as a central hub that bridges the coordination gaps between processing companies and farmers. Their role has been instrumental in fostering cooperation, which has led to sustainable growth in contracted production and increased efficiency within the sector. By reaching out to more farmers in their regions, collection centers allow processing companies to expand their geographic coverage without the need for significant investments in supply chain logistics.



Processors: Small and medium enterprises (SMEs), particularly **food processors**, drove the market for their demand of the raw material. These businesses benefited from a consistent supply of quality agricultural products, enabling them to **increase their operational capacity** and expand into new markets.

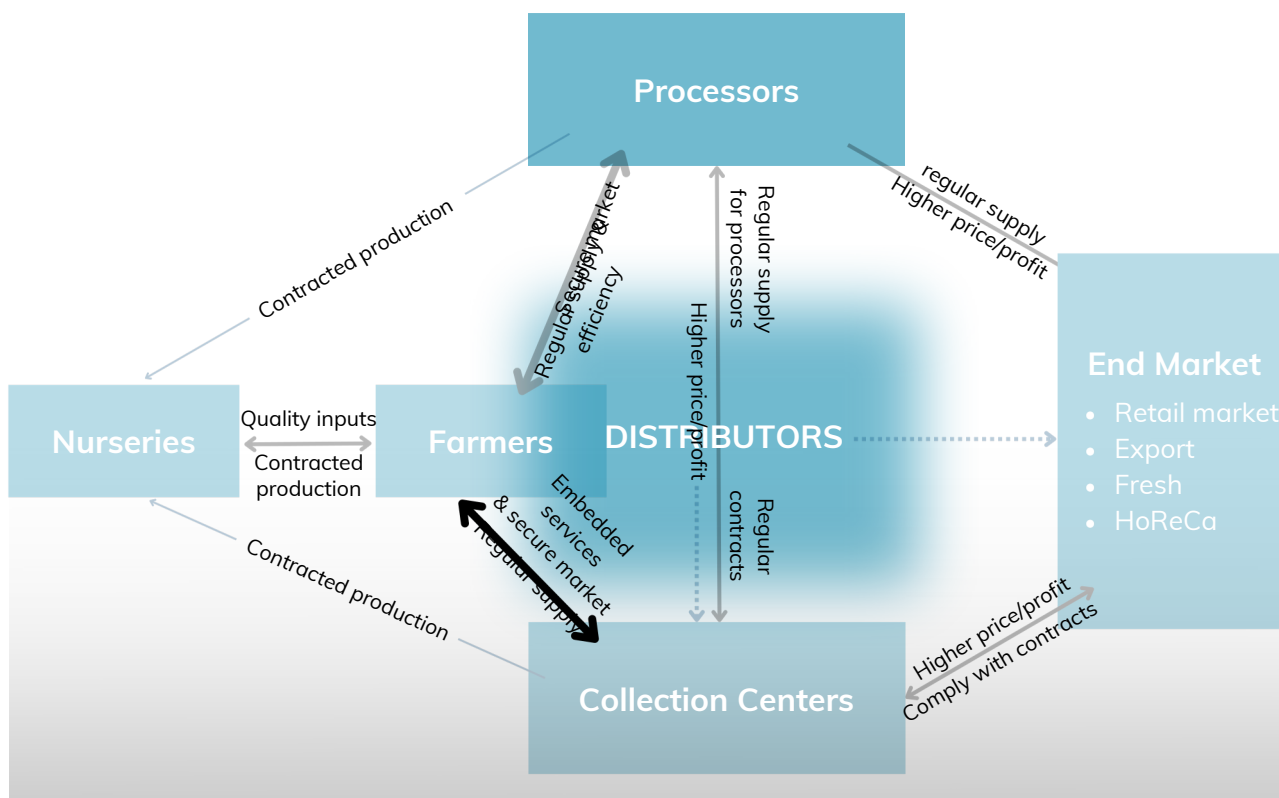


Figure 2: Business Model of the Intervention

4. CHALLENGES AND OPPORTUNITIES

Key Challenges

Despite the success of the **contract farming model**, the following challenges have emerged during its implementation:

1 Farmers capacity to fulfill commitment: A significant challenge in contract farming has been the unpredictability of farmers' commitments to produce quality products. Factors such as lack of quality inputs, limited access to advisory support, post-harvest losses, and seasonal high open market prices can result in broken contracts. Conversely, contractors may struggle to supply inputs, collect production, or have the capacity to process goods, which destabilizes the secure market access that contract farming is intended to provide for smallholder farmers.

2 Stakeholder Resistance to New Models: Introducing contract farming often faces resistance from stakeholders, particularly those used to traditional farming practices. In Kosovo, many farmers and local market actors are hesitant to adopt this model due to mistrust of formal agreements and concerns about long-term commitments. Additionally, some buyers, especially small businesses, may resist contracts for fear of losing flexibility and opportunities in the open market.

5. RESULTS FROM THE INTERVENTION

Timeline of the intervention

The **contractfarming intervention** began with the pilot project for the "Introduction of Industrial Tomatoes" in **2014**. A key finding from this initial phase was the importance of securing high-quality raw materials from nearby sources to ensure the quality of the final product. The intervention was refined in **2015** and **2016** through the "Promotion of Aggregation Services" and "Expansion of Aggregation Services," showing early signs of success. By **2017**, the initiative gained momentum, collaborating with various partners across different products under the "Promotion and Facilitation of Contract Farming and Production Suitable for Processing," benefiting over **325 farmers** through partnerships with **two collection centers** and **one input dealer**.

The years **2018** and **2019** marked the peak of success as the project transitioned to a facilitation role, allowing market players to take ownership of their business models for scaling and sustainability. Despite the disruptions caused by the **COVID-19** pandemic in **2020**, the agricultural sector demonstrated resilience, adapting to changing dynamics while leveraging existing relationships to navigate interconnected markets such as quality input production and financing. The timeline of the intervention illustrates its trajectory and achievements.

In the subsequent years, PPSE's support to contracted production evolved further, emphasizing the pivotal role of **collection centres** as providers of **embedded services** to farmers. These centres increasingly integrated advisory support, access to inputs, and contract facilitation, strengthening trust and coordination along the value chain. A major shift during this period was the growing recognition of the importance of **quality seedlings** as a foundation for improving yields and consistency in contracted production. PPSE worked with partners to establish and expand **modern nurseries**—**seven** of which are now **operational** across different regions of **Kosovo**—ensuring a reliable supply of high-quality seedlings adapted to local conditions. These developments were accompanied by broader enabling environment reforms that improved sector coordination and helped consolidate the systemic gains achieved in previous years.

5. RESULTS FROM THE INTERVENTION

Timeline of the intervention

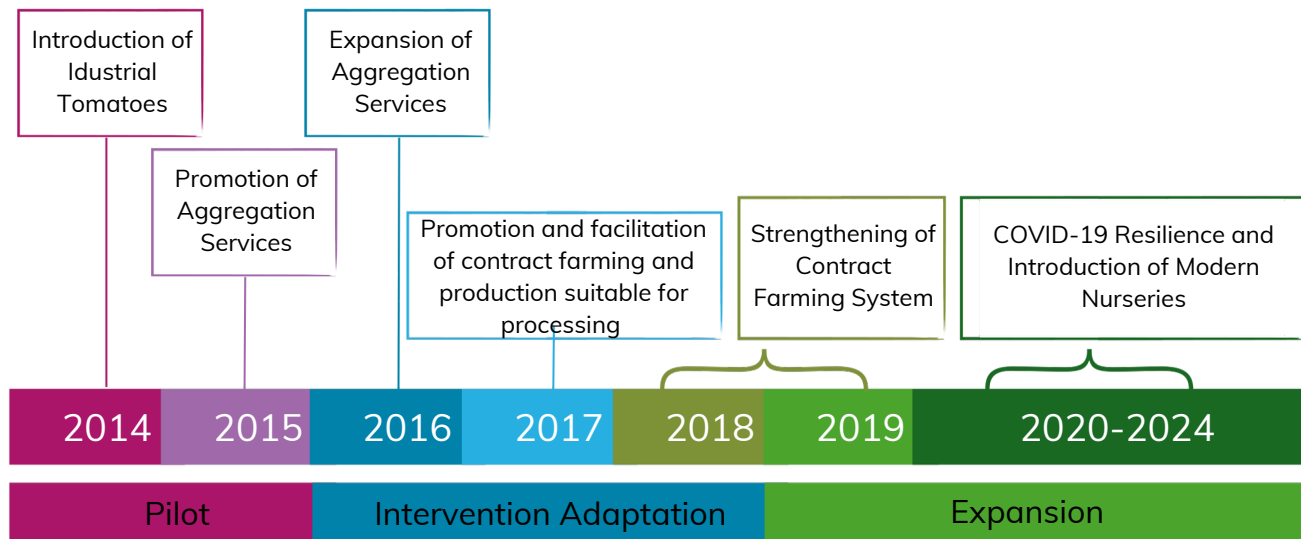
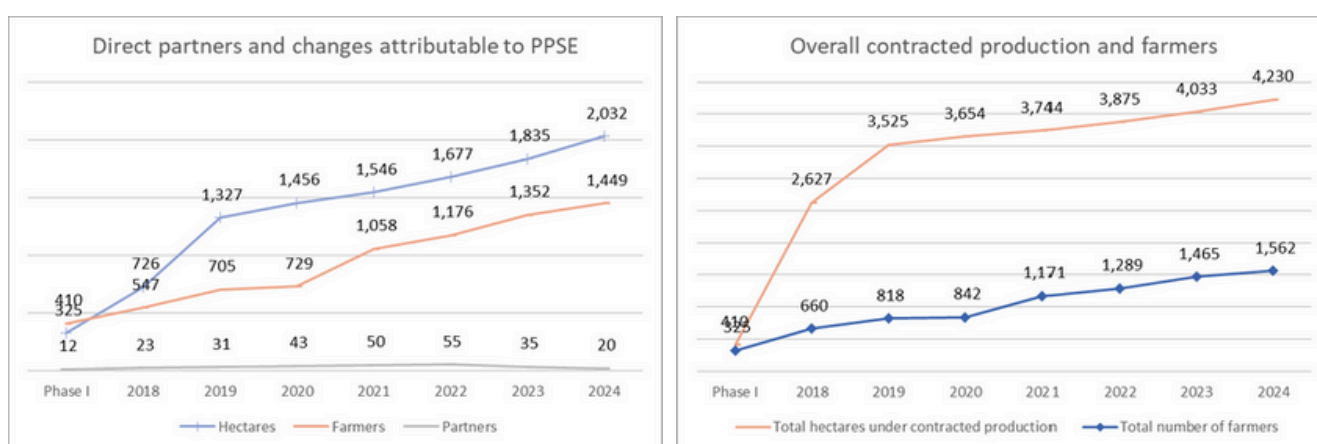


Figure 3: Evaluation of the Intervention

Results of the intervention

The intervention on contract farming model in Kosovo has shown impressive results since its implementation. The pilot intervention started with 29 farmers testing the model with production in around 30 hectares of land using two SMEs as contractors. In 2024, the project assessed the outreach of the intervention involving more than **1,400** farmers and **up to 55 small and medium enterprises (SMEs)** across around **2,000** hectares of farmland, out of ~10,000 hectares of land for vegetable production. By formalizing relationships between farmers and buyers, the model has provided participating farmers with **secure market access**, allowing them to sell their produce at agreed-upon prices and quantities. This security has had a direct impact on **increasing farmer incomes**.



Gender inclusivity

Contract farming under the PPSE project has demonstrated significant growth and gender inclusivity, contributing to agricultural development and rural livelihoods in Kosovo. By 2024, contracted vegetable production expanded to 30% of the overall vegetable production area, covering over 4,200 hectares, while the cultivation of medicinal and aromatic plants (MAPs) increased tenfold to more than 1,200 hectares.

Women's participation in contract farming saw notable improvements, with their involvement in capacity-building activities increasing from less than 10% in 2015 to over 40% by 2017, and women accounted for 37% of those decently employed through contract farming interventions. The introduction of specialized seedling nurseries further supported this growth, ensuring high-quality inputs and creating opportunities for women, particularly in labor-intensive aspects such as seedling production.

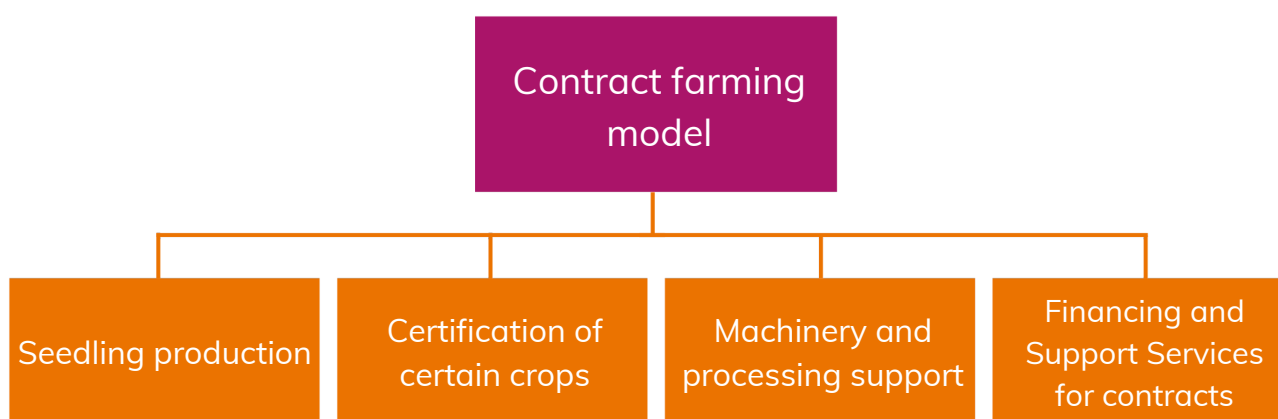
The contract farming model not only enhanced stability and efficiency in supply chains but also facilitated fair contracts, spurred a 30% growth in cultivated areas and farmer participation, and generated substantial economic and social benefits, including increased gender inclusion, across rural communities.

In addition to these direct benefits for farmers, the contract farming model has had a **positive impact on the market** by improving **supply chain efficiency**. By ensuring reliable supply from farmers, contractors such as food processors and collection centers have been able to streamline their operations, reduce costs associated with raw materials. Starting in 2018, some collection centers began to diversify their business activities beyond simply aggregating raw materials for processors. They initiated simple processing of these raw materials, which not only broadened their client base but also enhanced their revenue sources. For example, Agrocelina, the largest collection center in Rahovec, invested in machinery to facilitate the semi-processing of peppers, such as cutting, freezing, and packing,

A key component of the intervention's success has been its emphasis on **adaptive management**. The contract farming model was designed to be flexible, allowing it to respond to **contextual realities** such as price and demand in the open market, raw materials sourced from the neighboring countries, building tr-related disruptions, or changes in export markets. By continuously monitoring the market and the behavior of stakeholders, the project has been able to make adjustments. For example, the project has supported Agrocelina to improve its processing capacity and export certain crops to EU consequently, contract more farmers and increase production. This model demonstrated circular business practices by ensuring resource efficiency and sustainable production by integrating local businesses into more sustainable and resilient market systems.

Market Response of the Intervention

As the business model evolved and stakeholders began to recognize its benefits, the project transitioned into a more facilitative role. The PPSE project expanded the contract farming model by establishing partnership agreements with stakeholders in the interconnected markets. Lessons from the Contract farming interventions helped the project to spin off interventions in the seedling production, certification, machinery and financing markets to strengthen the core transaction between farmers-contractors.



Resilience During the COVID-19 Pandemic

One of the most significant tests for the contract farming model came during the **COVID-19 pandemic**. Despite disruptions caused by lockdowns and global supply chain issues, contract farming proved resilient. Farmers with contracts continued production, supported by collection centers that maintained a steady supply of inputs.

6. LESSONS LEARNED FROM THE INTERVENTION

Farmer Resilience and Satisfaction: The majority of farmers involved in contract farming expressed high levels of satisfaction, with 65% reporting positive experiences due to secure markets and increased profitability. Many farmers expanded their production areas rather than replacing existing crops, making the innovation less risky and easier to adopt.



Contracts Built on Trust: The contracts were largely built on trust, with the written clauses serving as reminders rather than punitive measures. This approach strengthened the relationships between farmers and private partners, fostering a sense of collaboration rather than compliance.



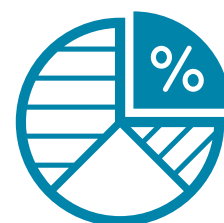
Gradual Ownership by Private Partners: Over time, private partners took greater ownership of the contract farming model. The project initially facilitated the process and absorbed some of the risk, allowing the partners to gradually digest and adapt the model to their specific needs and context.



Importance of Strong Partnerships: Building effective partnerships among key stakeholders—farmers, processors, collection centers, and input suppliers—proved crucial to the success of contract farming. These strong relationships fostered trust and collaboration, leading to better coordination and a more efficient supply chain. Engaging local businesses was essential in establishing reliable market linkages (domestic and export), which enhanced the overall impact of the intervention.



Thin Market Dynamics: Operating in a thin market, with only a few companies participating, required flexibility. Both the project and the private partners recognized the need for adaptation to meet market realities. The project worked closely with partners, aligning the interventions to their needs and ensuring the model was practical for both the supply chain and the businesses involved.



Close-Knit Communities: The tight-knit farming communities had access to market information beyond the contractor (e.g collection centers). This increased transparency allowed farmers to make informed decisions and negotiate better terms, strengthening their position in the supply chain.



Capacity Building is Essential: Investing in capacity building for farmers was vital to the success of the contract farming model. Training on agricultural practices, machinery use, planting, and aggregation empowered farmers to reduce costs, increase productivity, and improve product quality. Tailored programs addressed the specific needs of different farmer groups, including women and minorities, ensuring they could meet contractual obligations and market demands.



Sustainability of the Model: The success of the contract farming model in Kosovo demonstrates its long-term sustainability. Over the years, both the number of contracted farmers and the area under contract production have increased. The introduction of contract financing, where farmers use contracts as collateral to access loans, has opened new avenues for financial inclusion and growth.



Integration of Support Services: The incorporation of embedded support services—such as access to high-quality inputs (through nurseries), technical advice, and machinery for planting, harvesting, and sorting—enhanced the effectiveness of the contract farming model. With labor shortages due to migration, many SMEs and farmers invested in mechanization.



7. LOOKING AHEAD

The **contract farming model** introduced by the **Promoting Private Sector Employment (PPSE) project** has significantly impacted Kosovo's Food and Natural Ingredients (FNI) sector. By fostering robust partnerships among farmers, collection centers, and processors, it has secured market access and enhanced productivity. The model's scalability is evident, demonstrating substantial growth among market participants.

Employing the **Market Systems Development (MSD)** approach allowed the model to adapt to local challenges, such as limited access to quality inputs and advisory services. This adaptability underscores that while systemic development requires time, it can lead to exponential growth. Key lessons emphasize the importance of building trust, investing in training and capacity development, and integrating support services like quality inputs and advisory assistance, all contributing to increased income for stakeholders.

Looking ahead, focusing on digitalization, mechanization, and crop insurance will be crucial to position contract farming as a powerful tool for rural development and market expansion within the sector.