Unilever Regenerative Agriculture Program

Knorr Regenerative Agriculture Transition for Vegetables in Serbia

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Country: Serbia
Supplier: Telek Paprika
Sector: Vegetables
Implementing Partner: TechnoServe
Timeline: 2023-2027
Funded by: Knorr & Telek Paprika

About Telek Paprika:
Established in 1993, Telek is a family-owned company dedicated to producing high-quality vegetables, with its own agricultural production.

Regenerative Agriculture Intervention Pillars:

- Nutrition management
- Crop diversity
- Biological control

Unilever

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Compost inputs collection area. (Image: Telek Paprika)

Regenerative Agriculture Impact Opportunity

Situation

Farmers in Serbia have faced significant environmental challenges in recent years:

- Extreme weather events like heatwaves, droughts, and hailstorms made more frequent by climate change
- Soil degradation caused by years of intensive farming

These challenges, coupled with rising costs for inputs like fertilizer and other agrochemicals, threaten farmer livelihoods.

Impact on Farm Businesses

Vegetable farmers in Serbia are facing major yield losses. Last year, farmers reported 10-20% lower yields due to declining soil health and weather related challenges, such as extreme heat waves. Furthermore, they have experienced an overall rise in production costs, with some inputs north of 20% more costly (e.g., fertilizers).

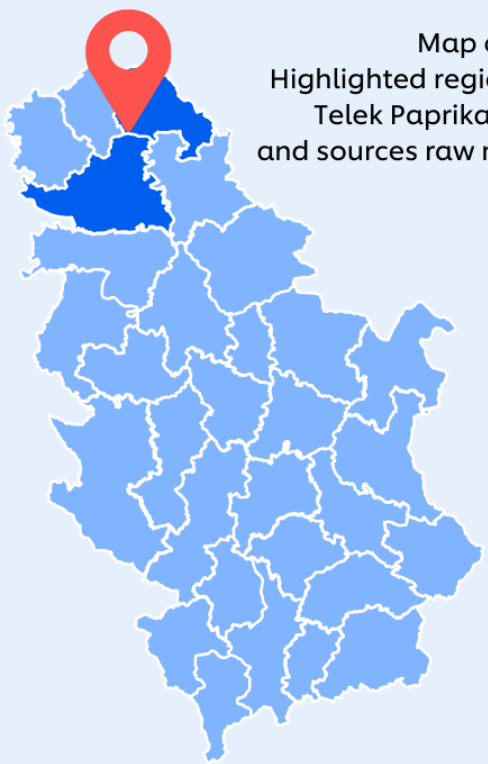
Regenerative Agriculture Solution

Regenerative agriculture practices, such as cover cropping and the application of nutrient rich compost, enable reduction in use of agrochemicals by up to 30%, and can improve soil health to maintain and even improve yields up to 5%.

Telek Paprika's supply chain in Serbia

Telek Paprika produces ~2,800 tonnes of dried vegetables per year sourcing from their own farms, as well as independent contract farmers.

Telek Paprika contract farms typically range from 10-100 hectares and produce various vegetables, rotating with corn, wheat, and other winter crops.



Map of Serbia: Highlighted region where Telek Paprika is based and sources raw materials

Farm-level regenerative agriculture transition plan

Nutrition Management

Monitoring plant nutrient content to adjust fertilization program based on crop needs

Producing nutrient rich compost on-site with factory residuals and applying to soil for enhanced nutrition

Farm Benefits

- Reduce volume and costs of agrochemicals applied
- Improve plant and soil health
- Maintain or improve yields

Impact Areas

Soil GHG Water

Crop Diversity

Conducting trials of several mixes of cover crops during the winter season, primarily for the purpose of soil cover and improvement

Farm Benefits

- Increase nitrogen availability
- Reduce need for herbicides
- Increase soil organic matter

Impact Areas

Soil GHG Water

Biological Control

Planting of wildflower strips, hedgerows, and implementing other afforestation practices to enhance biodiversity on the farms

Farm Benefits

- Increase the farm area land that is restored
- Attract natural predators of pests to protect crop yields

Impact Areas

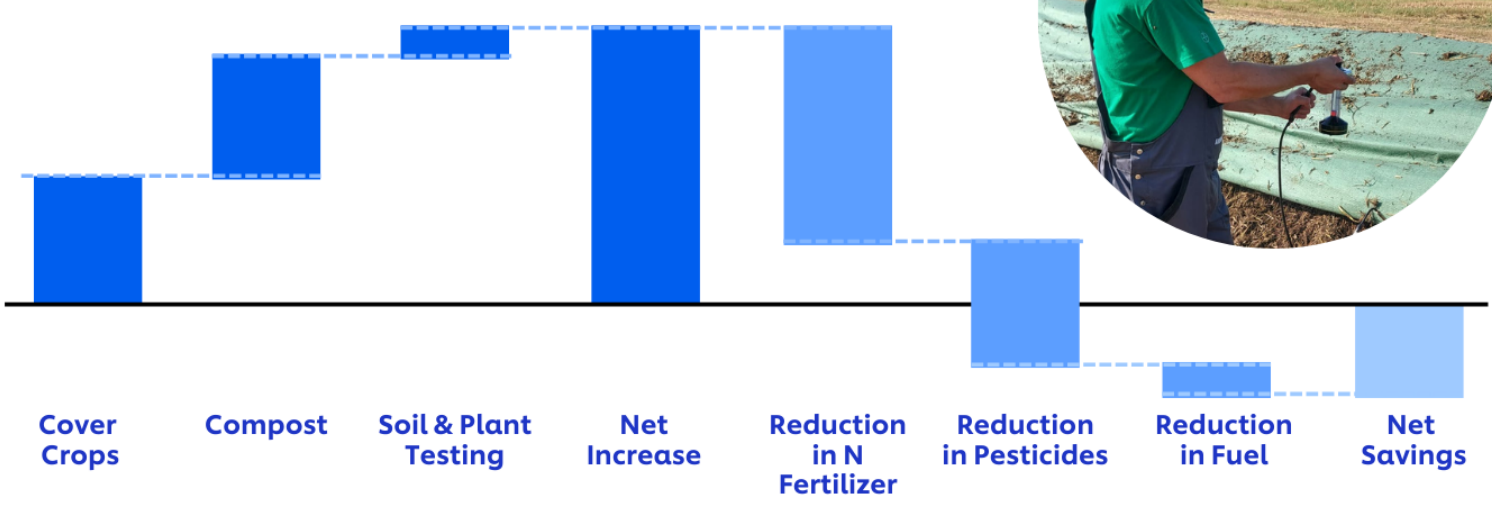
Biodiversity

Farmer Business Case

While regenerative agriculture practices incur additional operational costs, they also create savings elsewhere, resulting in a net positive economic result

Operational Expense: Changes From Baseline *(Per hectare)*

Compost quality evaluation. (Image: Telek Paprika)



On-farm compost production. (Image: Telek Paprika)

Program Highlight

Farm-to-Factory Circularity: Transforming Factory Residuals into Farm Compost

Telek Paprika has embraced a circular approach to managing residuals from the dehydration factory, which can become game-changing for the farm and the business.

Through the program, Telek Paprika is testing production of high quality compost by mixing residuals with wood chips, manure, and straw, and running an on-site aerobic process. Applying compost that is rich with nutrients and microorganisms will improve soil microbiology and enhance nutrient uptake, and therefore reduce the need for agrochemicals. Doing this at scale is expected to significantly boost soil health and crop performance across Telek Paprika farms and in the future contract farmers too.

> **"This program has given Telek Paprika access to a large network of global experts in Regen Ag and new advanced technologies, which are relevant across their various crops."**
>
> Regenerative Agriculture Program Director

Program Interventions

Technical Assistance

Deliver the right knowledge to the right people at the right time, customized to the needs and context of vegetable producers in Serbia. Examples include customized agronomist support for assessing plant and soil analyses to develop targeted fertilization plans, recommendations for suitable plant species and wildflowers that enhance biodiversity, and technical guidance on compost production using factory residues.

Catalytic Grants

Provide capital injections to Telek Paprika for purchasing farm inputs and accelerating the transition to regenerative agriculture. These grants support activities such as acquiring cover crop seeds, capital expenditures for compost pits and turners, sap and soil testing, and other essential inputs for regenerative production.

External Incentives

Soft mechanisms to drive supplier and farmer behavior change, including commercial benefits with Unilever, public recognition, and insulation from the ongoing trend towards more strict EU regulations on agrochemicals.

> **"In order to keep the soil fertile in the long run, we need to implement a cultivation technology that consciously protects and improves it. I believe that with the help of Unilever's experienced advisors, we can incorporate many elements of regenerative agriculture into our already successful practices, ensuring that we can continue to provide high-quality products to our customers in the long term."**

Jozsef Telek
CEO & Founder of Telek Paprika

On-farm parsley harvesting. (Image: Telek Paprika)

Join us to help fund sustainable development and regenerative practices, create innovative financial solutions, and set industry standards to drive collective sustainability efforts.

Together, we can accelerate progress towards a sustainable and resilient future!

Expected impact by 2027

200
hectares of land regenerated

Up to **30%**
reduction in synthetic Nitrogen fertilizer

Up to **5%**
improvement in yield

External partners

Research Institute of Organic Agriculture FiBL
Provides agronomist support for nutrition management and recommendations for organic inputs and crop diversity.

University of Novi Sad: Faculty of Agriculture
Delivers biodiversity expert support on wildflowers, hedgerows, and afforestation, and monitors beneficial species.

Nature Metrics
Conducts laboratory analyses of soil microbiology and biodiversity for program measurement and validation of practices.

Unilever and TechnoServe: Global Partnership to Drive Regenerative Transformation of Agricultural Supply Chains

Unilever and TechnoServe have partnered to promote Regenerative Agriculture practices across Unilever's global supply chain, leveraging Unilever's ambitious sustainability goals and TechnoServe's extensive experience working on Regenerative Agriculture with farmers worldwide.

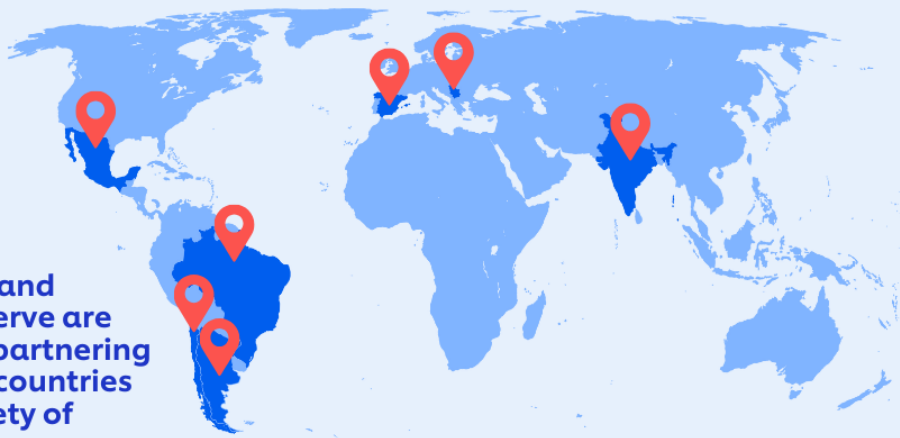
Unilever Regenerative Agriculture Program

Unilever's goal is to implement regenerative agriculture on **1 million hectares of land by 2030.** Currently there are 46 projects in collaboration with suppliers, covering 270,000 hectares of land transitioning to regenerative systems. These efforts are instrumental for the production of Unilever's Nutrition products, including rice, soybeans, wheat, rapeseed, corn, tea and dairy products. These numbers will continue to grow as the Regenerative Agriculture program scales.

To achieve these goals, Unilever has launched programs with suppliers to implement the **Regenerative Agriculture Principles**, addressing the unique challenges of different crops and landscapes. Together with soil and farming experts, Unilever is helping suppliers identify the most impactful practices, focusing on **soil, water, climate, biodiversity, and livelihoods.**

TechnoServe "Regenerate 30"

TechnoServe is an action-oriented non-profit organization with operations **across 30 countries and over 50 years** of proven results. TechnoServe works to build inclusive, regenerative business models that create living incomes and social wellbeing while cutting emissions and strengthening biodiversity. The **Regenerate 30 initiative puts farmers and small businesses at the heart of the solution** to create a people, nature and climate positive world. TechnoServe's "Regenerate 30" goal is 30M people, 30% revenue boost, 30M tons of carbon cut, and 30M hectares under sustainable management.



Unilever and TechnoServe are actively partnering across 7 countries and variety of crops

Open to partnerships
to deepen and scale impact through collaboration and leverage across our portfolio

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