

SLOVENIA

Farm's performance, restructuring & modernisation

Location

Ljutomer

Programming period

2014 – 2020

Priority

P2 – Competitiveness

Measure

M04 – Investments in
physical assets

Funding (EUR)

Total budget 873 666.04
EAFRD 324 491.14
National/Reg. 108 163.72
Private 441 011.18

Project duration

2017 – 2017

Project promoter

MARIO KURTOVIĆ
(KMG PANORGANIC)

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Website

www.panorganic.si

Investing in cutting edge production techniques (hydroponics in pots) allowed a farmer to fill a gap in the market increasing the availability of vegetables in winter, with minimal environmental impact.

Summary

The production of vegetables in Slovenia covers the demand of the country only during the production season, i.e. between May and October. Off-season, vegetable production is insufficient to cover the market. European Agricultural Fund for Rural Development (EAFRD) beneficiary, Mario Kurtović, saw this as an opportunity to meet demand.

He decided to invest in the hydroponic cultivation of lettuce and herbs in pots (the technique of growing plants without soil). Investment support under Rural Development Programme measure M04 enabled him to acquire a biomass-burning heater, construct new nurseries for the ground cultivation of vegetables and also assemble a hydroponic line to cultivate lettuce and herbs.



Results

Slovenian consumers can now buy Slovenian lettuce, herbs, and spinach in shops throughout the year;

Self-sufficiency in lettuce production in Slovenia increased from 6.7 % to 19.7 % (STAT);

The project resulted in reduced production costs due to the optimisation of wood biomass heating;

Sales increased from € 1.2 million (2016) to € 2.4 million (2018); and

Twelve new jobs were created.

Lessons & Recommendations

- ❑ It is difficult to find well informed consultants on hydroponic cultivation, as most of them lack experience of this technology.
- ❑ Due to the success of this venture, other former arable farmers began cultivating vegetables after talking to Mario Kurtović.

Context

The farm 'KMG Panorganic Mario Kurtović' is the first producer in Central Europe to begin the hydroponic cultivation of lettuce and herbs in pots. Mario learned about this system in Belgium and the Netherlands, where this technology is already applied. Also, the current trends indicate that agriculture needs to focus on new technologies, as conventional agriculture will no longer allow for the production of vegetables on vast areas of land.

Lettuce, herbs and spinach can be cultivated throughout the year, in the coldest winter months and the hottest summer days, i.e. 365 days of the year, using equipment to generate heat energy from wood biomass. Hydroponic cultivation (lettuce and herbs in pots) and cultivation in the ground (spinach) are sustainable, as these methods do not produce wastewater, they require no pesticides, and such cultivation saves up to 95 % of water due to the recirculation system. Wood biomass is used to provide additional heating.

Objectives

The aim of this project was to provide Slovenian consumers with premium lettuce and herbs throughout the year.

Activities

The investment support under M04 enabled the beneficiary to:

- acquire heating equipment which included a heating furnace, automation for regulating the heat, fans and sensors for the weather conditions;
- install a wood biomass-fuelled furnace with its equipment;
- construct new nurseries for ground cultivation of vegetables; and
- acquire and assemble a hydroponic line to cultivate lettuce and herbs.

The initial situation was not easy as it took some time to master the production technology and obtain the anticipated product quality. Today the situation is different with experience, and the advantages of the investment becoming evident.

Following completion of the project, Mario Kurtović expanded his production to Austria where he set up the company Panorganix AT GmbH & CO.KG. The nursery is located in Mureck, Südoststeiermark, Styria, where a nursery similar to the one in Slovenia was set up for the hydroponic cultivation of lettuce and herbs. In Austria, lettuce is sold to Austrian SPAR AG and herbs to Lidl Österreich supermarkets.

In 2021, he plans to build a nursery for hydroponic cultivation in Romania.

The next investment will be near Berlin, where Mario Kurtović wants to build the most advanced nursery with state-of-the-art production technology. His goal is to become the largest lettuce and herb producer in Europe.

KMG Panorganic Mario Kurtović is the only producer of lettuce and herbs from hydroponic cultivation in Central Europe and the only large producer of Slovenian spinach. He sells his products in Slovenia (Mercator, SPAR, Hofer, Lidl, Engrotuš), Austria (SPAR AG, Lidl Österreich), Croatia (Konzum, SPAR), Hungary (Tesco), and Romania.

Main results

- Slovenian consumers can now buy Slovenian lettuce, herbs, and spinach in shops throughout the year;
- self-sufficiency in lettuce production in Slovenia increased from 6.7 % to 19.7 % (STAT);
- the project resulted in reduced production costs due to the optimisation of wood biomass heating;
- sales increased from € 1.2 million (2016) to € 2.4 million (2018); and
- twelve new jobs were created.

Key lessons

It is difficult to find well informed consultants on hydroponic cultivation, as most of them lack experience of this technology.

Due to the success of this venture, other former arable farmers began cultivating vegetables after talking to Mario Kurtović.

Additional sources of information

www.facebook.com/panorganix