

ESTONIA

Diversification & job creation

Location

Nõrava küla

Programming period

2014 - 2020

Axis / Priority

6 - Social inclusion & local development

Measure

M6 - Farm & business developmen

Funding (EUR)

Total budget 166 686

EAFRD 56 443

National/regional 9 960

Private 16 283

Other 84 000

Project duration

2015 – 2016

Project promoter

Laastu talu OÜ

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A family-owned strawberry farm in Estonia used EAFRD funding to develop the generation of solar power, enabling the farm to expand and increasing their profits.

Summary

A family-owned strawberry farm in Estonia needed to develop its own electricity production to become economically sustainable and to expand its activities. The family invested in producing solar energy, giving them extra revenue from selling to the grid. The lower-cost solar power would also give their products a market advantage.



The Laastu farm used the EAFRD funding to construct the solar panels. They also were supported by a bank and insurance firm, but only after significant difficulties in finding ones ready to take on their project given a lack of other similar examples. They have been able to offer consulting services to others planning similar projects.

Results

Construction of solar panels to provide renewable electricity source and income from selling to the grid.

Increase of sales volumes by 300%, total company profits by 100% and creation of one permanent job.

Increase in visitors from 50 to 500 per year, with most hoping to implement similar projects.

They began consulting services to help other planning similar developments.

Lessons & Recommendations

- ❑ Assess the locations of future solar plants carefully in terms of natural resources, supply capacity and electricity network.
- ❑ Understand the maintenance needs of the solar plant and differences in costs of various devices and panels as well as their impact on productivity.
- ❑ Be prepared for unexpected problems such as technical failures, additional financing needs, difficulties in finding insurance and anomalies in production forecasts.
- ❑ Use of an independent consultant, who is familiar with the prices of components, units, and predicted production data could help.

Context

Laastu is a family-owned strawberry farm in Estonia. Strawberry production is a seasonal activity, which made it difficult for the business to run throughout the year. The family decided to expand their activities. One of the possible options was to develop capacities to conserve the strawberries for a long period for the food industry, but it is energy-intensive. Another option was to develop rural tourism opportunities because the farm is located in very beautiful surroundings, but again more electricity would be required.

The company needed to develop in stages, starting with the creation of its own renewable electricity production. The revenue from the sale of the electricity would provide turnover all year round, making the farm more economically sustainable and at the same time providing year-round employment.

Objectives

The project hoped to achieve growth in its turnover and more cash flow. The added revenue was also a precondition for developing a new production facility in a second phase. The next stage would use mainly locally produced solar energy. Use of solar power also gives the farm's products a potential market advantage in terms of marketing and its overall net-cost as energy consumption is reduced.

Activities

The family started with a vision of what they wanted to achieve, the potential of the site as well as the company's resources in terms of knowledge, finance, human capital and time. They decided that using renewable energy would help develop manufacturing as well as tourism. Using the knowledge of one of the owners, they started analysing opportunities for energy production. Producing electricity from solar energy presented the lowest risk.

They knew it was worth submitting an application for funding, because they saw the project's potential and how it would meet the criteria. Before they started works, they got partial approvals from the operators of the network

and from the local municipality for construction.

After they were granted financial support, they faced barriers in finding additional finances. It was difficult to sell the project to the banks because no one had tried a similar business model in Estonia before. They had several meetings to provide professional explanations about renewable energy, about energy investments and its profitability. Finally, they found a partner in SEB bank.

They had similar difficulties with insurance companies, who saw insurmountable risks. Several of them declined the opportunity to offer insurance. Nevertheless, they were able to find an insurance firm willing to support their project after they gave explanations and examples.

Construction was delayed eight months because of the negotiations with banks and insurance companies. The construction took three months. After that, they were ready to give their first locally-produced green electricity to the distribution grid. Economic and technical evaluations of the project are still ongoing. But they are positive about the results.



“Technological solutions for the efficient use of green energy in production processes are already available, but they must be consciously applied to ensure the company's competitiveness and economic efficiency with environmental sustainability for years.”

Main Results

The project resulted in a stable monthly turnover and cash flow for the company. As a result, it has been possible to start new projects. Since the project is still in its infancy, it is too soon to talk about numbers. But they increased sales volumes approximately by 300%, the company's total profits by 100% and created one permanent job. The number of visitors to the farm has increased from 50 per year to over 500 visits. Most visitors are renewable energy enthusiasts, who hope to implement similar projects. The project has shown that a greater understanding about renewable energy is necessary. They began a new service in consulting for similar projects. In the future, they plan to expand the possibilities for training young people in sustainable development through integrating nature and new technology.



Key lessons

In replicating this example, the locations of future solar power plants should be assessed very carefully in terms of natural resources, self-supply capacity and the presence of an electricity network. One should understand the maintenance needs of the solar power plant and the differences in costs of various devices and panels as well as their impact on productivity.

Be prepared for unexpected surprises, which were not considered at the start of the project such as technical failures, additional financing needs, difficulties in finding insurance and anomalies in production forecasts.

Use of an independent consultant, who is familiar with the prices of components, units, and predicted production data would have been helpful. Development of similar solutions and integrating production units to cover self-consumption is sustainable and well worth considering.

Additional sources of information

www.facebook.com/Magusmari.ee