

This series of informative fiches aim to present, in summary, examples of practices and approaches that EU Member States and Regions have put in place in order to implement their Rural Development Programmes in the current period. These examples want to contribute to the understanding of what has worked well and less well in the delivery of the 2007-2013 RDPs and as far as possible, draw lessons in the view of future improvement of the programmes.

A New Quark Cheese Product with Probiotic Culture



BACKGROUND AND SCOPE OF THE PROJECT

The agricultural dairy cooperative Mlekarna Olešnice was originally established in 1937. Nowadays it is a hybrid cooperative with a strong partner investor. The investor is the group Interlacto s.r.o (i.e. limited liability company ltd.) a renowned dairy exporter.

Mlekarna Olešnice produces various types of soft cheese and butter. The variety of products gradually changed and broadened during last decade. During this period, the cooperative also introduced a new type of quark cheese (curd) with granular structure that is similar to cottage cheese. This type of cheese is common in the Polish market, but rare in the Czech Republic. Actually, Mlekarna Olesnice is the only large producer of it in the country. The original product was produced in triangular shape in three modes by fat content and packed in a shrink wrap. However, such packaging gets

easily perforate resulting in whey leakage. Residual oxygen and oxygen entering due to the perforation of the wrap allows the development of unwanted moulds, limiting shelf life of the product. This packaging also does not allow for preserving the unconsumed product. Both, retailers and consumers indicated interest in improving the packaging – prolonging the shelf life / storing possibility.

In spite of packaging imperfections, the product attracted consumers; the demand was higher than the capacity of the production line. Thus the cooperative wished to increase production of the product and to add value by improving its quality in order to gain price premiums.

To this aim they decided to innovate by launching a new variety of quark cheese in a new wrap and by replacing part of the production line by equipment allowing for two shapes (circular, triangular), two packaging modes (shrink wrap, sealed plastic container) and higher volume of production. The idea of the product innovation rested in the introduction of probiotic cultures in the curding following the recent trend of functional food. To implement it, collaboration with the research sector was needed.

Keywords: Competitiveness of Agriculture & Forestry, Restructuring, developing physical potential, and promoting innovation

EU Member State: Czech Republic

Specific Location: Olešnice, South Moravia Region (CZ064), Jihovýchod (CZ06)

Main beneficiary: Mlekarna Olešnice, Agricultural Dairy Cooperative; Research organisation (Milcom); Technology supplier

RDP Measure: Measure 124, Cooperation for development of new products, processes and technologies

Funds Allocated: Total project cost: €565 120

EAFRD contribution: €211 920

National contribution: €70 640

Private contribution: €282 560

Implementation Period: 01.07.2010 to 30.06.2011





DEVELOPMENT AND PLANNING

The popularity of the current product was regarded as a sufficient indicator of market opportunities. Besides expanding the production by roughly 20% a possibility of adding value to the product, i.e. supplying a more “luxury” variety, was considered as a marketing strategy. It was expected that the new product will gradually replace the current one up to 50% of the quark cheese supply. This was expected to raise revenue substantially.

Usually, quark cheese is a cooking ingredient and it less often it is consumed directly. This constituted a challenge as to choose the right way of adding value to this cheese. Adding ingredients like herbs or spices was considered as insufficiently attractive for consumers as it is too common. Instead it was decided to go for probiotic cultures to targeted increasingly health-conscious population.



The cooperative did calculations of future earnings due to product and process innovations and compared them with envisaged project costs. Getting support from the RDP was critical for rising sufficient funds for the investment.

A detailed project plan was prepared as it was also required in the application for RDP funds (Measure 124). The main activities described in the project plan were: i) selection of the research institute; ii) development of recipes and methods of work, technological processes, selection and control of raw materials; iii) production in the laboratory and technical scale, testing physical, chemical and microbiological parameters; iv) life testing and sensory evaluation of the product; v) selection of a technology supplier, vi) preparation of product design in cooperation with the packaging manufacturer; vii) installation of the new technology/equipment.

The latter represented a significant risk, since it required suspending the production for several weeks. To overcome this problem the company prepared some stocks of the product, but they were limited because of relatively short storage-life of the triangular quark cheese. Also the company informed all customers (retailers) that there will be a break in the supply of the product. However, any extension of the planned production break would damage good business relationships and would eventually result in the loss of the market.

The terms of reference of the RDP call included a requirement for presenting potential research partners that would have the capacity to offer “innovation” support services and in the implementation phase they have to launch an open call for research partners and make the contract. Approaching the milk research institute (Milcom) during the planning phase appeared to be critical, since there was no other response to the tender for research partner during the project implementation.

The project plan included careful time planning with milestones representing important control points.



IMPLEMENTATION OF THE PROJECT

The implementation closely followed the plan outlined above. To keep eyes on the project implementation, the cooperative established a taskforce constituted of the members of the management and led by the director. The members had their monitoring tasks and the progress of the project realisation was evaluated in regular meetings.

The starting date had to be postponed due to the time needed before the project was officially approved. However, since both the envisaged research institution and the technology provided had sufficient capacity and were well coordinated the implementation phase finished at the envisaged time with no further delays.

The interest of research organisations to provide research services according to the project needs appeared to be

limited. Only, the earlier approached organisation applied to the tender for research services announced in the course of the project.

The technology supplier understood well the need of Mlekarna Olesnice to maintain the planned time for the installation of the new equipment. Some organisational changes in the production line were implemented and new staff had to be hired. Nevertheless, these changes went smoothly.

The cost of the project appeared to be lower than envisaged; about 10% of the support was not used.



RESULTS OF THE PROJECT IMPLEMENTATION

A new product with probiotic culture has come on to the market in the Czech Republic and Slovakia. It has extended the range of still more popular functional foods. The longer shelf life thanks to its packaging, which is also practical and consumer friendly, was appreciated by retailers and consumers. From this point of view, the project has helped to improve the competitiveness and viability of the dairy company. However, the sales have not reached the expected level yet. At the moment, the quark cheese with probiotic culture represents 20% of quark cheese sales. The slower replacement of the triangular quark cheese can largely be accounted to higher price and economic crisis forcing households to reduce expenses. Nevertheless, total sales of quark cheese increased after completing the project and are stable.

Expanding quark cheese production generated some new jobs.

The project has had two further positive effects: within the group Interlacto and in the local area. Mlekarna Olesnice is the smallest dairy plant of the group Interlacto situated in rather remote rural area. The business stagnated and the prospect of the plant was poor before the new investor entered. The project contributed to improve the picture of the plant within the group that it has capacity to come with innovations and to attract “richer” or “concerned” consumers.

Innovation and investment activities of locally important business and employer provide positive signals to local business, local administration/government and population that the place is economically viable.



LESSONS LEARNT

Support to innovation (Measure 124 of RDP) is one of the few opportunities for food industry businesses to get support to their development. Thus interest in applying for innovative projects is high; however, the capacity of food research organisations is rather limited; as a consequence those food processors who have established contacts with research institutions have an advantage. It was also clear in this project that an early contact with the potential research partner was very important.

The support helped the dairy company to explore new market possibilities: Quark cheese/curd is a common cooking ingredient in the Czech households. It required a bit of courage to try to turn this product in a more “luxury” or more exceptional product. The company had it and the programme (the evaluation board) recognised the potential of the proposed innovation. The cooperative’s management underlines the weight of “uncertainty” or “risk” due to lack of experience to which detail should the project be elaborated in order to convince the evaluators. More detailed guidelines or advice might help to reduce such risks.

The beneficiary emphasises two factors of the project success: a) careful planning, and b) strict monitoring of the project implementation. Both might represent substantial transaction costs which however pay off. In addition, compiling the documentation for the proposal and payments claims was a bit of an administrative burden. Complexity and administrative costs (overall transaction costs) of projects focusing on innovation of products or pro-

cesses based on cooperation with research entities can discourage smaller companies from applying. Often complexity results from research based innovation and its translation in the application and the implementation plan. A good example of excessive administration is the pre-selection of a research partner followed by an open call.

The positive experience with the participation in Measure 124 was shared with the other members of the Interlacto group. However, for sharing it with the other businesses in the dairy processing sector or in the local area there is neither platform nor will. Concerning the latter, it is associated with the fact that the beneficiary might give out some know-how which constitutes its competitive advantage.



WHAT'S NEXT?

Although the sales have not reached the expected level, Mlekarna Olesnice considers the project as successful and financially sustainable. There are indications that the new product was admitted by customers (both, retailers and consumers); there are also direct positive reactions from consumers (e-mails, Facebook).

The project opened the way toward a new (and still niche) market of functional food in the company.

In 2011, the company launched a new innovation project involving cooperation with a research organisation in similar direction processing whey.



SUMMARY

The idea of the project was to develop a new product - quark cheese with probiotic culture - through collaboration with a research institute. The project helped the dairy cooperative to utilise an opportunity in the emerging market for functional food and thus to improve the commercial value of one of its dominant products - quark cheese/curd.

Tips/lessons related to the beneficiary:

At the project inception phase:

- ◆ A clear marketing strategy toward value added products.
- ◆ A well substantiated identification of opportunities - in this case, in the emerging market of functional foods.

At the project planning and development phase:

- ◆ A thorough project implementation plan, including main activities, cost and realistic timetable (this is the first paramount success factor).
- ◆ Commitment of the management to explore innovation possibilities.
- ◆ Approaching the potential research organisation during the planning phase in order to identify their capacities and willingness to collaborate.

At the project implementation phase:

- ◆ Close monitoring and follow-up of all implementation works by a dedicated project management team - task-force (this is the second paramount success factor).
- ◆ Close cooperation of the beneficiary and the organisation providing research services as well as the supplier of the technology – sharing involvement of company staff in implementation to obtain advice and suggestions on the optimal distribution of investments (research, design, equipment etc.) or the optimal installation of equipment/machinery

Tips/lessons related to Managing Authorities and other public sector actors:

- ◆ There is a need for clear guidelines what a proposal for an innovation project including cooperation with a research organization should include and demonstrate.
- ◆ Future programmes should concentrate on effective platform for sharing good practices while guaranteeing protection of intellectual property rights (technological know-how).