



TITLE

LACTIES - Innovation, eco-efficiency and security in SME's of the dairy sector

HIGHLIGHTS

Increasing the competitiveness of SMEs in the dairy sector and developing activities that incorporate technological innovation in companies in terms of their products and processes, eco-efficiency and valorization of endogenous resources.

ABSTRACT

In Portugal, 98% of the Dairy Sector is made up of micro, small and medium-sized enterprises. These are characterized by a number of particularities: 1. The low diversification of products, which is almost always limited to the manufacture of cheese and curd, which limits the flexibility and adaptation of firms to the needs and constraints of the market; 2. The low level of innovation and the incorporation of technology, which greatly conditions the increase of its eco-efficiency; 3. The dispersion through the national territory, which does not allow the implementation of joint actions of waste treatment and environmental protection. In addition, the majority of micro-enterprises and some small and medium-sized enterprises are focused on the processing of small ruminant (sheep / goat) milk. If in some cases this milk is used in the production of high-value-added PDO cheese, in most cases it is processed into cheeses without any distinctive character and marketed at significantly lower values.

The main objectives of this project are: 1. Innovation in conventional dairy products (e.g. sheep yoghurts, curd cheese with probiotics) and non-conventional dairy products (e.g. yogurts / fermented dairy drinks based on liquid whey protein concentrates - CLPS) with the aim of diversifying the company's product portfolio; 2. Improving the energy efficiency of manufacturing processes, with a particular focus on the curdling process, through the design and development of innovative equipment, as well as the evaluation of solutions for the use of sorbent and ultrafiltration (UF) permeates resulting from obtaining CLPS.

Two prototypes will be developed for the production of curd; 1 for micro-enterprises and with a processing capacity of 100-200 L of serum, and another with a larger size (500-1,000 L) for larger companies. Although some of the objectives to be achieved result from the needs already felt by the participating companies (e.g. CLPS-based yogurts and dairy products) given the cross-cutting use of the results to be obtained, they are expected to have very significant impacts on the sector, and to be incorporated by a significant number of companies. In this case, the developed prototypes and the extracts of thyme are in particular. During the development of the project activities, other solutions can be evaluated to expand the range of products/ processes that can also be incorporated by companies.

KEYWORDS

Dairy Products, New Product Development, Innovation, SMEs.



PROMOTERS / PARTNERS

Instituto Politécnico de Coimbra - Escola Superior Agrária de Coimbra (Coordinator); Escola Superior de Biotecnologia – Universidade Católica Portuguesa; Valinox, Industrias Metalomecânicas, SA; ANCOSE - Associação Nacional de Criadores de Ovinos Serra da Estrela; ACOS - Associação de Agricultores do Sul; ESTRELACOOOP - Cooperativa dos Produtores de Queijo Serra da Estrela, CRL.; Tété II - Produtos Lácteos, Lda.; CONSULAI, Consultoria Agro-Industrial Lda; ISA - Instituto Superior de Agronomia; Sabores & Ambientes Serra da Estrela - Comercialização de Produtos Tradicionais, Lda; Lourofood, Lda.; Queijaria Guilherme Unip. Lda; CEBAL - Centro de Biotecnologia Agrícola e Agro-Alimentar do Alentejo; INIAV - Instituto Nacional de Investigação Agrária e Veterinária, I.P.; IPB/ESA - Instituto Politécnico de Beja - Escola Superior Agrária.

FINANCING PROGRAM	EXECUTION DATE	GLOBAL BUDGET
PDR2020 (PDR2020-101-030775) Region: Center	Data de início:01/10/2017 Data de fim: 30/09/2021	Total: €382687,2 FEADER: €287015,4

ADDITIONAL INFORMATION	inovacao.rederural.gov.pt/images/imagens/docs_go/23_-_og_lacties.pdf
------------------------	--