



Quintil
Valley

CHALLENGE 3

**“MANURE MANAGEMENT FOR THE
PRODUCTION OF INNOVATIVE FOODS”**

CHALLENGE LACTEA

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PERÚ

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CHALLENGE 3: MANURE MANAGEMENT FOR THE PRODUCTION OF INNOVATIVE FOODS

Identified Problem:

Láctea S.A. generates approximately 12,000 tons of solid manure annually, with its current use limited by the lack of advanced technological solutions, affecting its economic potential and operational efficiency.

Main Objective:

Develop advanced technological processes that convert manure into innovative, sustainable, and economically profitable products, integrated into a circular economy model.

Key Success Indicators:

- Effective and scalable implementation of innovative technological solutions.
- Generation of products with clear economic and commercial viability, applicable to strategic sectors.
- Effective integration with existing production processes within the Rocío Group.

Desired Solutions:

- Advanced biotechnological processes to produce functional and nutritional supplements for animals.
- Application of innovative bioconversion techniques using black soldier fly larvae, fungi, and other organisms to obtain proteins or bioactive compounds.
- Development of industrial biomaterials, such as biodegradable bioplastics and textiles made from manure.
- Circular economic models that maximize operational and commercial synergies within the Rocío Group ecosystem (agro-exporter).
- Specialized production of biofertilizers optimized for specific, high-profit commercial crops (especially for agro-export crops).
- Applications of biomaterials.

Undesired Solutions:

- Solutions limited to traditional composting or basic fertilizers.
- Solutions that are not scalable to the annual volume of 12,000 tons.
- Projects that do not clearly demonstrate an economic return or effective integration into existing processes.