BIODIGESTERS

INDUSTRIAL AGRICULTURE PROJECT

EXECUTIVE SUMMARY

In order to support the implementation of biodigesters that allow the generation of bio-fertilizers, bio-pesticides, biofuels, electrical energy, thermal energy, potable water, etc., an implementation agreement is proposed, which includes:

● **PRODUCTIVE PROMOTION** – Production and industrialization of environmentally friendly fertilizers and pesticides

● **SOLVING AGRICULTURAL WASTE** – By industrializing rejected biomass in agriculture, contamination will be avoided, production costs will be reduced, and organic products can be offered.

● **ADDING VALUE** – By fertilizing and deworming entire plantations, value is added to all agricultural products being offered.

● **COMMERCIALIZATION** – Establish a commercial network for the organic products developed.

● **TRAINING** – Techniques for green care, transformation, and business management.

The total cost of the project is three million one hundred twenty-five thousand dollars ($3,125,000), which covers the points mentioned.

For working capital, it will be necessary to cover the costs of around 24 employees, the coverage of basic services, and connectivity. In addition, maintenance controls and logistics costs are included in the budget.

LOCATION

This project will be settled all over the country.

JUSTIFICATION

The cost of urea has skyrocketed, and its use is controversial, sparking a wave of contradictions as it negatively impacts soil quality, underground water sources, and initially burns both the soil and the plants it comes into contact with.

The application of biodigesters to produce biofertilizers not only allows for large-scale, low-cost production, but also enhances its effectiveness, potentially increasing its potency fourfold.

The use of biofertilizers enables the agricultural product to be considered GREEN or Organic.

Biofertilizer can also be used as a biopesticide.

Biofertilizer ensures that any product grown with its use can be classified as organic, which is a significant commercial advantage.

As a highly accepted product due to its organic nature and its ability to prevent greenhouse gas emissions, it can also be offered for export.

According to the vast majority of producer associations, we have observed a strong interest in purchasing this fertilizer as soon as possible. Unfortunately, the demand is extremely high, and in order to mitigate risks, we are limiting the proposal to the minimum viable amount.

OBJECTIVES

General Objective: Produce biofertilizers at a low cost, serving as a replacement for urea, with better results and at a much lower cost.

Specific Objectives:
- Produce biofertilizers;
- Produce bio-pesticides;
- Generate bio-methane;
- Recover water, up to potable water quality;
- Promote the production of organic agricultural products;
- Technically and economically evaluate the developed technological package;
- Determine the cost and selling price of the product.

INVESTMENT

The investment required for the physical implementation of the plant includes:

AÑO	PRESUPUESTO
0	2.150.000
1	750.000*
2	225.000*
Total	$ 3’125.000

*Reinvestment for optimizing production and plant capacity.

PROJECT COMPONENTS

COMPONENT	BUDGET
Previous Investments	70.000
Land	80.000
Construction	225.000
Equipment	1.480.000
Working capital	1.050.000
Others	220.000
Total	**$ 3.125.000**

BENEFITS

The economic benefits are reflected in its financial projection calculated over 10 years as follows:

- **Internal Rate of Return (IRR):** 59%
- **Net Present Value (NPV):** $92,781,872, calculated at a discount rate of 12%, demonstrating that it is a financially viable initiative.
- **Return on Investment (ROI):** The investment is recovered in less than 5 years of operation, with a ROI of less than 3 years.
- **Total Investment:** $3,125,000