



Aras Free Trade - Industrial Zone Organization

## Technical and Economic Feasibility Form for Production Projects (Industrial - Agricultural)

### 1. Project:

Production of Human Probiotic Powder and Tablets.

### 2. Project Presentation: Types of Human Probiotic Powder and Tablets.

### 3. Description of the Project:

#### a. Necessity of the Project:

The decision to produce human probiotic powder and tablets is driven by their status as essential components in human and animal food products, as well as their potential use as medicinal products. The strong market demand and high profit margins associated with these products further justify their production.

b. Mainland Privileges (Raw Material – Market): Factors considered for production include the availability of usable resources such as minerals, chemicals, energy, and affordable labor, as well as the existing opportunities in domestic and international markets for food and pharmaceutical products.

#### c. Market Potentials:

Given the importance of food and pharmaceutical production in ensuring food security, there is a favorable market and demand for food-related products, including human probiotic powder and tablets.

d. Added Value: By leveraging innovative technologies to optimize resource utilization, food production can generate significant value-added benefits.

#### 4. Market Feasibility; Economic – Financial:

a. Annual Demand for the Product (Domestic – Countries of the Region – World Demand): The demand for the produced products in the food industry within Iran, as well as in regional and global markets, is significant. This demand is driven by the high quality and safety standards maintained in the production of these goods.

b. Raw Materials Provision Potential (Domestic – Countries of the Region): The required raw materials for manufacturing human probiotic tablets and capsules can primarily be procured domestically. However, if necessary, investors and applicants also have the option to source raw materials from international suppliers.

c. Local and Regional Markets:

Apart from the domestic market, the target markets for these products encompass countries in the Persian Gulf region, CIS countries, and European countries.

#### 5. FS Components:

a. Fixed Capital: 1,083,752,000,000 IRR  
Working Capital: 146,046,000,000 IRR

b. PBP: 3.57 years

c. IRR: 29.4

d. Land Area: 6,000 m<sup>2</sup>  
Built-up Area: 3,600 m<sup>2</sup>

e. Direct Employment: 60 individuals

#### 6. Technical Specs:

a. Table of Raw Materials and Estimated Consumption:

- 1- Mineral salts
- 2- Chemical substances
- 3- Packaging containers

4- Glucose

5- Others

**b.** Table of Raw Materials and Estimated Production:

Types of Human Probiotic Powder and Tablets

**c.** Table of Machinery and Production Line Equipment

1- Control and production system

2- Packaging and vacuum packing system

3- Processing system

4- Air supply and drying system

5- Others

**d.** Schematic Diagram of the Production Process:

Microbial bank formation - Initial cultivation - Primary cultivation fermenter - Material combination - Bio-mass separation - Spray dryer - Freeze dryer.

**e.** Table of Energy and Labor Costs

Costs:

280,298 million IRR

Energy:	1,837 million IRR
Work force:	876,558 million IRR

**7. Risks of the Project:**

**a.** Existing Risks in case of Losing Potential Market:

Exchange rate risk, inflation risk, liquidity risk, and business risk.

**b.** Risk of Rising Raw Material Price:

In the event of an increase in the exchange rate, the cost of imported raw materials also rises, which directly affects the overall cost of the product.

**c.** Retention Risk:

Financial provision based on the national currency, Aligning liabilities or assets with a specific unit of currency, Presenting financial reports and statements in the currency without conversion, Participating in derivative market contracts, Conducting compensatory transactions, Engaging in purchase and sale contracts for products based on the national currency.

