



Business plan preparation of Encapsulated Fungal spore As Nutritional Matrix Fertilizer

For Office Use:

Applicant(s)

Full Name(s)	Gender	Nationality
Seyedeh Fatemeh Mohammadi	Female	Iran
Elmira Shokouhinia	Female	Iran
Sara Hosseini	Female	Iran
MohammadHossein Moeini	Male	Iran

Visa Type: Start- up

City and Country of Submitting the Visa Application: Netherland

1. About the Company

Company Full Name: Agro Spore Tech

Expected Date of Incorporation:

(no more than 6 months after your planned date of arrival in the UK)

Proposed Business Location in the UK:

(Please give us an idea of a preferred business location/town/city. This is important as location benefits to the business will be highlighted in the plan)

Why do you prefer the above listed locations in the UK?

(Please provide us with a few genuine reasons to believe that the above stated location favours the company and its operations – e.g. I run an import-export business so it is important that my business is near a sea port)

Website:

(If you have one)

2. Insert Company Logo Below:

(If you have already designed your Logo or branding please insert it here so it can be used in the business plan)

3. Mission & Vision

Mission Statement:

we are driven by a passion for innovation and a commitment to addressing the challenges facing modern agriculture. Our Encapsulated Fungal Spores as Natural Nutritional Matrix Fertilizer is at the heart of our mission to create a world where farming is not only productive but also environmentally responsible and sustainable by harnessing the power of nature. We are dedicated to providing cutting-edge solutions in order to promoting sustainable agriculture, improving crop yields, contributing to environmental conservation and enhancing global food security, through the use of Encapsulated Fungal Spores as a natural nutritional matrix fertilizer.

Vision Statement:

Our vision is to lead the way in sustainable agriculture by harnessing the power of encapsulated fungal spores as a ground breaking nutritional matrix fertilizer. We envision a future where our innovative solutions transform the way crops are grown and nourished, fostering healthier ecosystems, higher yields, and a more resilient planet. Through cutting-edge research, environmentally responsible practices, and a commitment to global food security, we strive to be the driving force behind a greener, more bountiful world.

4. Company Ownership

(Please fill the following table to let us know about the ownership structure and source of funds)

Shareholder Name:	Share (in %)	Job Title	Investment	Visa Applicant? (Yes or No)	Nationality	Gender
Mohammadhossein Moeini	%25	CEO - Chief Financial & Marketing Officer	-	Yes	Iran	Male
Elmira Shokouhinia	%25	Quality Control Manager & Regulatory Affair manager	-	Yes	Iran	Female
Sara Hosseini	%25	Production Manager operating Officer	-	Yes	Iran	Female
Seyedeh Fatemeh Mohammadi	%25	Sale director & R&D Manager	-	Yes	Iran	Female

5. Other Funding Sources:

-European Innovation Council (EIC)

The EIC, part of the European Commission's Horizon Europe program can support our innovative start up and companies across various sectors, including agri-tech. It provides funding, mentoring, and networking opportunities for our businesses working on cutting-edge technologies.

-EIT Food Organization

EIT Food as a European Knowledge and Innovation Community (KIC) funded by the European Institute of Innovation and Technology (EIT). It focuses on promoting a sustainable and healthy food system through offers grants, accelerators, and resources for start up and entrepreneurs in the food and agriculture sector.

-European Structural and Investment Funds (ESIF)

ESIF are a set of European Union funds designed to support economic growth and innovation in member states. These funds can be used to finance our project related to sustainable agriculture and innovation in agriculture.

-European Regional Development Fund (ERDF)

ERDF is one of the ESIF funds that can be channeled into projects that focus on sustainable agriculture and innovation in agriculture. It supports regional development and competitiveness.

-European Union Agricultural Funds

The Common Agricultural Policy (CAP) of the European Union includes several funds and measures that promote sustainability in agriculture. These funds are aimed at supporting farmers and environmentally friendly agricultural practices such our project.

-The European Investment Bank (EIB)

The EIB can offer financing and investment support for our project that contribute to sustainability and innovation, including those in the agriculture and agri-tech sectors.

-InnovFin Agri Tech Guarantee

The InnovFin program, provides guarantees to financial intermediaries to encourage lending to innovative agri-tech businesses. So,It can help our start up access finance for research, development, and innovation projects.

-National Ministries of Agriculture and Environment

These ministries often offer grants, subsidies, and support for projects that align with national and EU-level sustainability and innovation goals.

-Local and Regional Development Agencies

Many local and regional development agencies offer funding and resources to support sustainable agriculture and innovation in their respective areas .So, the can support our business in different domain as a start up company.

-Corporate Partnerships: There are numerous potential corporate partnerships that can help expand our reach and capabilities in the European agricultural market. Here are some examples such as:

Agricultural Co-operatives ,AgTech Startups, Biotechnology Companies, Organic Food Retailers , Greenhouse Technology Companies , E-commerce Platforms and Environmental NGOs.

These partnerships may include funding, access to resources, and distribution channels.

There are the best Europe Stock funds

- Janus Henderson European Focus Fund.
- Invesco EQV European Small Company Fd.
- Brown Advisory - WMC Strat Eurp Eq Fd.
- DFA Continental Small Company Portfolio.
- BlackRock Eurofund.
- Columbia Acorn European Fund.
- JPMorgan Europe Dynamic Fund.

6. Products or Services Description

Offering 1: Product Service Both

Name: Encapsulated fungal spore Fertilizer

Price:1.76 ERU / kg

Cost of Sales (excluding workforce & misc. expenses):

Contribution to Total Sales (e.g. contributes 40% in total sales):

Description:

Nowadays, an unsustainable population expansion, severe global climate change, and untenable crop losses, are considered to pose high risks concerning food security .

So ,in order to tackle crop losses, farming communities mainly depend on chemical based-fertilizers to manage and nutrient plant which enhances crop productivity worldwide. The statistics show that about 190 million tons of fertilizers are synthesized and applied globally. However, this enormous consumption of synthetic products causes many problems, such as direct damage to human health, and the contamination of air, soil, water, and food.

On the other side, the results of many researches revealed that the application of beneficial microorganisms can play an important role in the plant growth development and the enhancement of crop production .Also, remarkably, plant growth-promoting fungi (PGPF) can aid in the rehabilitation of degraded soil as well as enhancing the productivity of crops.

In this role ,Our company designs and produce formulations based on completely biodegradable and sustainable materials in combine with encapsulation techniques can protect and deliver fungal cells as a bio fertilizer .In our product ,Encapsulation defined as the activity of entrapping active fungal cells in a matrix to prolong their shelf life and availability for an extended period in the field . This process has the potential to protect fungi from harsh environmental factors and provide organic sources to the soil.

In brife, our product as an innovative agricultural solution combines the synergistic benefits of Fungi and advanced encapsulation technology in order to reducing the use of chemical-based fertilizers and supply natural nutrients which promotes a green environment and sustainable agricultural systems.

7. Competitive Comparison

According to the competitor analysis, the following will be significant as current competitors . Major vendors in the Global Slow- Release Fertilizers Market include:

- Andermatt Biocontrol AG (Switzerland)
- BIOORG PRO(Estonia)
- Mapleton Agri Biotec (Australia)
- Agriculture Solutions Inc. (CANADA)
- Agrinos (Norway)
- Symborg(Spain)
- Rizobacter (Argentina)
- Madras Fertilizers
- Sresta Natural Bioproducts
- Lallemand
- National Fertilizers

According to some of these competitors the comparison criteria are as following:

Company	Our company	BIOORG PRO(Estonia)	Mapleton Agri Biotec (Australia)	Andermatt Biocontrol AG (Switzerland)	Agriculture Solutions Inc. (CANADA)
Product Name	Licorice Spore	BIOORG BF	CataPult SuperFine	T-Gro	MycoApply® Ultrafine Endo
Nutrient Content	Fungal spore Licorice root	Arbuscular Mycorrhizal Fungi	Mycorrhizae & Bacillus	Trichoderma asperellum <i>strain</i>	Four Species Mycorrhizal Inoculant
Mechanism	Expand beyond root zone & surface area, producing nutrient enzymes	Mutualistic relationship with roots	Release and capture bound nutrients	Enhances & stimulates plant growth and helps to buffer plants	Expand beyond root zone & surface area, producing nutrient enzymes
longevity	6-9 month		1 year		6 month
Compatibility	+	+	+	+	+
Sustainability	+	+	+	+	+
Price	\$1.76 / kg	\$/kg			\$2.95/kg
Application Convenience	+	+	+	+	+
Customer Segmentation	Large scale Small scale	Large scale Small scale	Large scale Small scale	Large scale Small scale	Large scale Small scale
Distribution Channels	Store Online partnership	Store Online partnership	Store Online partnership	Store Online partnership	Store Online partnership
Field Trials and Research	+	+	+	+	+

8. Sales Literature

Our sales literature focuses on the company's collaboration for research validation, digital presence, participation in expos, educational initiatives, advanced production methods, and accessible distribution channels. It aims to engage potential customers by emphasizing the company's credibility, accessibility, and commitment to advancing sustainable agriculture.

In term of detail for **sale Literature**, we can present following model:

“Experience Cutting-Edge Agriculture with Our Encapsulated Fungal Spores Fertilizer.”

At **AGRO SPORE TECH COMPANY**, we're at the forefront of agricultural innovation. Our encapsulated fungal spores fertilizer is designed to revolutionize crop cultivation, ensuring healthier plants and optimized yields while promoting sustainable farming practices.

Why Choose Us?

Scientific Validation: Collaborating with leading agricultural extension services and renowned universities, our product undergoes rigorous research and validation.

Online Engagement: Explore our informative website and vibrant social media channels for insightful content, updates, and expert tips on agricultural enhancement.

Expo Presence: Meet us at agricultural expos and trade fairs, where we showcase the transformative capabilities of our products.

Educational Workshops: Join our product demonstrations and workshops led by experts, gaining insights into optimal application methods for maximum benefits.

Production and Distribution Expertise:

Premium Materials: We source top-tier natural materials for our matrix, ensuring unparalleled quality.

Cutting-Edge Facility: Our production setup boasts state-of-the-art encapsulation technology with meticulous quality control measures.

Accessible Distribution: Through partnerships with agricultural supply stores and online retailers, our products are easily accessible to cater to your farming needs.

Join the Agricultural Revolution:

Unlock the potential of your crops with our encapsulated fungal spores fertilizer. Contact us for consultations, comprehensive information, and to partner in advancing sustainable agriculture.

[Contact Information]

[Website]

- Collaborate with agricultural extension services and universities for research validation.
- Develop an online presence with an informative website and engaging social media channels.
- Participate in agricultural expos and trade fairs to showcase our products.
- Offer product demonstrations and workshops to educate customers on proper application.

9. Target Market

Identifying the target market is crucial for a company specializing in encapsulated fungal spores as a nutritional matrix fertilizer. To effectively reach potential customers, our target market segments include:

Conventional Farmers Transitioning to Sustainable Practices:

- Farmers who are looking to reduce their reliance on synthetic fertilizers and adopt more sustainable and environmentally friendly agricultural practices.

Organic and Regenerative Agriculture Enthusiasts:

- Farmers who are already engaged in organic or regenerative farming and are seeking innovative solutions to improve soil health and enhance crop yields naturally.

Specialty Crop Producers:

- Farmers growing high-value crops such as fruits, vegetables, and herbs that benefit from nutrient-dense, soil-enhancing products.

Large Agricultural Operations:

- Large-scale commercial farms interested in sustainable farming practices to optimize crop production while minimizing environmental impact.

Horticultural and Nursery Businesses:

- Nurseries and greenhouse operators focused on producing healthy and vibrant ornamental plants, trees, and shrubs.

Urban and Vertical Farmers:

- Urban and vertical farming ventures that require efficient and sustainable solutions for limited-space agriculture.

Agricultural Co-operatives:

- Groups of farmers pooling resources and seeking cost-effective, sustainable solutions for their collective agricultural needs.

Landscaping and Turf Management Companies:

- Landscapers and turf professionals looking for eco-friendly soil amendments to create lush lawns and gardens.

Research and Educational Institutions:

- Agricultural research institutions and universities interested in studying and promoting sustainable farming practices.

Government Agricultural Programs:

- Government initiatives and programs aimed at promoting sustainable and environmentally responsible agriculture.

Environmental Stewardship Organizations:

- Organizations and NGOs focused on promoting sustainable agriculture and protecting natural ecosystems.

International Agricultural Markets:

- Export opportunities in countries where sustainable agriculture and environmentally friendly practices are gaining importance.

10. Management Team

Mohammad Mokhtarzadegan 40 years old with PHD degree in Material and Metallurgy from Tehran University and Master degree in Material selection for Engineering Design from Shiraz university. He works as faculty member & lecturer in Shiraz PAYAM NOOR UNIVERSITY from 2018 and as Official Expert in the field of Materials in Shiraz Association of Official Experts (IAOE) Fars Judiciary from 2017 till now. Additionally he has worked as lecturer of Shiraz Shahid Bahonar Technical College and Shiraz Shahid Rajae Technical College from 2017-2020. Dr. Mokhtarzadegan has been working as CEO and Chairman of the Board of Directors since 2013 in Dam Ara Sanat Vesta and Dam Ara IND since 2008.

According to his education & knowledge his professional skill include:

- Biomaterials
- Engineering Design
- Characterization
- Experimental & numerical Analysis
- Tissue Engineering
- Nanotechnology
- Mechanical analysis
- Additive manufacturing
- Drug delivery design system
- Machinery
- NDT analysis

He has many innovation related to Metallurgy , Material Engineering ,Natural Matrix based Fertilizer and Agricultural Frost protection. Also ,he achieved many Awards and Certification in science & Nanotechnology domain.

Dr.Mokhtarzadegan has some Books &Article Publication about Biopolymer and NanoTechnology

11.Start-up Funding

Securing start up funding for our company which specializing in encapsulated fungal spores as a nutritional matrix fertilizer can be challenging, but with a well-prepared plan and a compelling pitch, it's certainly achievable. There are several funding options to consider:

-Angel Investors: Seeking angel investors who are interested in early-stage start up often provide not only capital, but also valuable guidance and connections.

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-Venture Capital: Due to our business capabilities, high growth potential and scalable model, the venture capital can offer a partnership with our company.

-Agricultural Grants and Competitions: Investigating grants and competitions specifically aimed at agricultural start up. Many of these organizations and governments offer funding to encourage innovation in this sector.

-Accelerators and Incubators: Joining agriculture-focused start up accelerators and incubators. These programs often provide funding, mentorship, and resources .

-Alternative Lending: Investigation alternative lending options, such as peer-to-peer lending platforms or online lenders that may offer funding with flexible terms.

-Strategic Partnerships: Seeking partnerships with larger companies in the agricultural or biotechnology sectors. These partnerships may include funding, access to resources, and distribution channels.

-Government Grants and Subsidies: Considering and assessment of government programs, agricultural research grants, and subsidies that support sustainable agriculture and environmental innovation.

-Corporate Investors: Some corporations invest in start up that align with our strategic goals. We can explore potential corporate investors in the agricultural or biotech industry.

12. Personnel Hiring Plan

Year 1:

2 sales representatives

Year 2:

Add 1 more sales representative

Year 3:

Add 2 more sales representatives

Year 4:

Add 2 more sales representatives

Year 5:

Add 3 more sales representatives

13. Revenue Targets

Year 1: Foundation and Market Entry

Target Revenue :we Aim for a modest yet achievable revenue target, starting at \$500,000.

Market Penetration: Focusing on establishing a strong foothold in a specific regional market or among a particular set of crop producers.

Product Development: Ensuring product reliability, efficacy, and compatibility across various crop types.

Sales Channels: Establishment of the partnerships with local distributors, agricultural cooperatives, and online platforms.

Year 2: Expansion and Growth

Target Revenue: Setting an ambitious growth target of at least 70%, aiming for \$850,000 in revenue.

Market Diversification: Expanding the product's reach to neighbouring regions or introduce the product to new crop types or farming practices.

Investment in Marketing: Increase of the marketing efforts to enhance brand awareness and educate potential customers about the benefits of using the product.

Customer Acquisition: Focusing on acquiring new customers while retaining existing ones through loyalty programs or discounts.

Year 3: Consolidation and Product Enhancement

Target Revenue: Planning for a substantial increase, aiming for \$1.5 million in revenue.

Product Improvement: Investment in research and development to further enhance the product's formulation or introduce variations that cater to specific agricultural needs.

Market Leadership: Striving to become a recognized leader in the fungal spore fertilizer segment within targeted markets.

Strategic Alliances: preparing strategic alliances or collaborations with key players in the agricultural industry to broaden the product's reach.

Year 4: Scaling and Market Domination

Target Revenue: Continuing aggressive growth by setting a target of \$2.5 million in revenue.

Scaling Production: Investment in scaling up production capacity to meet increasing demand while maintaining product quality.

International Expansion: Exploring opportunities for international markets, aiming to enter at least one new global market.

Customer Satisfaction: Focusing on customer feedback and satisfaction to build a loyal customer base.

Year 5: Sustainable Growth and Innovation

Target Revenue: We aim for a revenue milestone of \$4 million.

Sustainability Initiatives: Emphasizing on sustainability in product manufacturing and promote environmentally friendly farming practices.

Innovation and R&D: We will allocate resources to stay ahead in innovation, potentially diversifying the product line or introducing advanced formulations.

Profitability: Concentration on sustainable profitability, ethical and responsible business practices.