



**Production of  
Biofertilizers and  
Organic Farming  
Food & Agriculture**

# **Introduction**

Bio-fertilizers are being essential component of organic farming are the preparations containing live or latent cells of efficient strains of nitrogen fixing, phosphate solubilizing or cellulolytic micro-organisms used for application to seed, soil or composting areas with the objective of increasing number of such micro-organisms and accelerate those microbial processes which augment the availability of nutrients that can be easily assimilated by plants. Biofertilizers play a very significant role in improving soil fertility by fixing atmospheric nitrogen, both, in association with plant roots and without it, solubilise insoluble soil phosphates and produces plant growth substances in the soil.





Use of biofertilizers is one of the important components of integrated nutrient management, as they are cost effective and renewable source of plant nutrients to supplement the chemical fertilizers for sustainable agriculture. Several microorganisms and their association with crop plants are being exploited in the production of biofertilizers.

### **Types of Biofertilizers:**

Rhizobium

Azotobacter

Azospirillum

Cyanobacteria

Azolla

Phosphate solubilizing microorganisms (PSM)



## Benefits of Bio-Fertilizer:

- *These are means of fixing the nutrient availability in the soil.*
- *Since a bio-fertilizer is technically living, it can symbiotically associate with plant roots. Involved microorganisms could readily and safely convert complex organic material into simple compounds, so that they are easily taken up by the plants. Microorganism function is in long duration, causing improvement of the soil fertility. It maintains the natural habitat of the soil. It increases crop yield by 20-30%, replaces chemical nitrogen and phosphorus by 25%, and stimulates plant growth. It can also provide protection against drought and some soil-borne diseases.*
- *Bio-fertilizers are cost-effective relative to chemical fertilizers. They have lower manufacturing costs, especially regarding nitrogen and phosphorus use.*

**The increasing demands for the biofertilizers and the awareness among farmers and planters in the use of biofertilizers have paved way for the fertilizer manufactures and new entrepreneurs to get into biofertilizer production. Bio-fertilizers Demand is much higher than the availability. It is estimated that by 2020, to achieve the targeted production of 321 million tonnes of food grain.**

**Organic farming system is not new in India and is being followed from ancient time. It is a method of farming system which primarily aimed at cultivating that land and raising crops in such a way as to keep the soil alive and in good health by use of organic wastes (crop, animal and farm waste, aquatic waste) and other biological material along with beneficial microbes (biofertilisers) to release nutrients to crops for increased sustainable production in an eco-friendly, pollution-free environment.**

# Benefits of Organic Farming

- *Helps in maintaining environment health by reducing the level of pollution*
- *Reduces human & animal hazards by reducing the level of residue in the product*
- *Increases the agricultural products and makes it sustainable*
- *Ensures the optimum utilization of natural resources for short-term benefit and helps in conserving them for future generation.*
- *Saves energy for both animal and machine and reduces the risk of crop failure*
- *Improves the physical and chemical properties of soil.*



**India is an agro based country. So organic farming plays an important role in agro field. The popularity of organic farming is gradually increasing and now organic agriculture is practiced in almost all countries of the world, and its share of agricultural land and farms is growing. As the organic food market continues to expand, so do the opportunities for small farmers.**

**It is believed by many that organic farming is the much healthier and sustainable option. Although the health benefits of organic food are yet to be proven fully, consumers are willing to pay a higher premium for organic crops. Many farmers in India are shifting to organic farming due to the domestic and international demand for organic food.**

**Organic foods are produced through systematic farming methods that do not involve any usage of pesticides and harmful chemicals for production. India has around 4.2 Million hectares of land which is certified for organic farming. The emergence of organic farming is also creating a wide array of job opportunities. Increasing awareness towards nutritious and healthy food and changing lifestyle are surging the demand for organic food, particularly across the metro cities.**

**There is a good chance that India's organic opportunity could scale from \$500 million to about \$2 billion — approx \$1 billion catering to the domestic market and \$1 billion for export markets — by 2020.**

The major contents of this book is crop response to biofertilizers, nitrogen fixation, phosphate solubilising microorganisms, application and evaluation techniques, Bio Gas production, pest and disease management system in agriculture, production, promotion, quality control, marketing, future research planning, photographs and details of machineries, list of manufacturers and suppliers of biofertilizers and organic farming in directory section.

This book will be of use and interest to consultants, researchers, libraries, entrepreneurs, manufacturers of biofertilizer and for those who wants to venture in to this field.



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# **MANUFACTURERS OF BIO-FERTILISERS AND ORGANIC FARMING**

# Tags

Advantages of biofertilizers, Become an Organic Farmer, Bio Fertilizer Business Opportunities, Bio fertilizer manufacturing process, Bio Fertilizer Process Plants, Bio fertilizer production line, Biofertilizer and Organic Farming Business, Biofertilizer Based Small Scale Industries Projects, Biofertilizer Business Plan, Biofertilizer Manufacturing Business Ideas, Biofertilizer Processing Industry in India, Biofertilizer Processing Profitable Projects, Biofertilizer Processing Projects, Bio-Fertilizer Processing unit, Biofertilizer Production and Application, biofertilizer production process, biofertilizer production unit, biofertilizer production, Biofertilizer Small Business Manufacturing, Bio-Fertilizers and Bio-Pesticides Unit, Bio-fertilizers in organic agriculture, Biofertilizers Technology, Biogas Production from Organic Biofertilizer, Book on Biofertilizer and Organic Farming, Business consultancy, Business consultant, Business Plan for a Startup Business, Business start-up, Formulation of Biopesticides, Great Opportunity for Startup, How to make bio fertilizer, How to manufacture bio fertilizer, How to Start a Biofertilizer business?, How to Start a Biofertilizer Production Business, How to Start a Fertilizer Business Startup Business, How to start a successful Biofertilizer business, How to start an organic farm business Startup Business, How to Start an Organic Farm, How to Start Biofertilizer Processing Industry in India, How to start fertilizer business in India, How to Start Organic Farming business in India, How to start organic farming, Industrial Project Report, Manufacture of Biofertilizer and Organic Farming,



Manufacturers of Bio-Fertilizers and Organic Farming, Most Profitable Biofertilizer Processing Business Ideas, New small scale ideas in Biofertilizer processing industry, Organic agriculture produce, Organic crops, Organic Farm Start Up, Organic farming and food production, Organic farming business plan in India, Organic Farming Entrepreneur, Organic Farming, Organic Food, Organic fruits and vegetables, Organic fruits, Organic Vegetables, Preparation of Project Profiles, Process technology books, Production of Biopesticides, Profitable Biofertilizer Business Ideas, Profitable small and cottage scale industries, Profitable Small Scale Biofertilizer Manufacturing, Project consultancy, Project consultant, Project for startups, Project identification and selection, Setting up and opening your Biofertilizer Business, Small Scale Biofertilizer Processing Projects, Small scale Biofertilizer production line, Small scale Commercial Biofertilizer making, Small Start-up Business Project, Start a Biofertilizer Manufacturing Unit, Start up India, Stand up India, Starting a Biofertilizer Processing Business, Starting a fertilizer business, Starting a New Organic Fertilizer Production Line, Starting an Organic Farm, Start-up Business Plan for Biofertilizer, Start-up Business Plan for Organic Farming, Startup ideas, Startup Project for Biofertilizer production, Startup Project for Organic Farming, Startup project plan, Startup, Types of biofertilizers, Biofertilizer technology book, Organic Farming technology book, Science and Technology of Organic Farming

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# ***Niir PROJECT CONSULTANCY SERVICES***

An ISO 9001:2008 Company

# Who are we?

- *One of the leading reliable names in industrial world for providing the most comprehensive technical consulting services*
- *We adopt a systematic approach to provide the strong fundamental support needed for the effective delivery of services to our Clients' in India & abroad*



*We at NPCS want to grow with you by providing solutions scale to suit your new operations and help you reduce risk and give a high return on application investments. We have successfully achieved top-notch quality standards with a high level of customer appreciation resulting in long lasting relation and large amount of referral work through technological breakthrough and innovative concepts. A large number of our Indian, Overseas and NRI Clients have appreciated our expertise for excellence which speaks volumes about our commitment and dedication to every client's success.*

*We bring deep, functional expertise, but are known for our holistic perspective: we capture value across boundaries and between the silos of any organization. We have proven a multiplier effect from optimizing the sum of the parts, not just the individual pieces. We actively encourage a culture of innovation, which facilitates the development of new technologies and ensures a high quality product.*

# What do we offer?

- *Project Identification*
- *Detailed Project Reports/Pre-feasibility Reports*
- *Business Plan*
- *Industry Trends*
- *Market Research Reports*
- *Technology Books and Directory*
- *Databases on CD-ROM*
- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
- *Entrepreneur India (An Industrial Monthly Journal)*

# How are we different ?

- *We have two decades long experience in project consultancy and market research field*
- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
- *We serve a wide array of customers , from individual entrepreneurs to Corporations and Foreign Investors*
- *We use authentic & reliable sources to ensure business precision*



# Our Approach

**Requirement collection**

**Thorough analysis of the project**

**Economic feasibility study of the Project**

**Market potential survey/research**

**Report Compilation**

# Who do we serve?

- *Public-sector Companies*
- *Corporates*
- *Government Undertakings*
- *Individual Entrepreneurs*
- *NRI's*
- *Foreign Investors*
- *Non-profit Organizations, NBFC's*
- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

# Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitability Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

## Sectors We Cover *Cont...*

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*



# Sectors We Cover *Cont...*

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

## Sectors We Cover *Cont...*

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

# Contact us

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