

# Entrepreneur India



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## About Us

NPCS is a well-known technical consultancy that focuses on Project Reports Compilation, and we have been following a tight system and procedure to assure only top quality in accordance with our clients' expectations in this rapidly increasing and changing market. We've created the list of the top projects to start your own business startups.

### EDITOR :

AJAY KUMAR GUPTA  
D.M.S, M.B.A.

Entrepreneurship Management

### ASSOCIATE EDITOR :

P. K. TRIPATHI  
UDANT GUPTA

### NIIR PROJECT CONSULTANCY SERVICES

AN ISO 9001:2015 CERTIFIED COMPANY

106 E, Kamla Nagar,  
Delhi-110 007 (India).

Tel. : 91-11-23843955  
91-11-23845886  
Mob.: +91-9097075054  
+91-8800733955

### E-mail :

info@niir.org  
npcs.india@gmail.com

### Website :

www.niir.org  
www.entrepreneurindia.co

## The Complete Book on Coconut & Coconut Products

(Coconut Cultivation, Manufacturing Process of Coconut Oil, Desiccated Coconut, Coconut Powder, Coconut Milk, Coconut Milk Powder, Coconut Chips, Coconut Water, Vinegar, Activated Carbon, Coconut Jam with Machinery Equipment Details & Factory Layout)

The coconut is a fruit of the palm tree, which grows in tropical regions. The white flesh of the coconut is used to make a variety of products, including milk, oil, butter, and flour. The manufacturing process of these products begins with the harvesting of coconuts from the trees.

This book provides valuable information on coconut and its products. It covers topics such as the history of coconuts, the benefits of coconuts, and how to manufacture coconut products. This book is a must-read for anyone interested in learning more about this amazing fruit! This book would be great for everyone who wants to learn more about coconut and its products.

If you're thinking about starting a business centered on coconuts, you're on the right track. Coconuts are a versatile product that can be used in a variety of ways, from cooking to cosmetics. Plus, they're a popular health food trend, so there's sure to be a market for your products. As with any new venture, it is important to do your research before diving in head first. Here is a guide to get you started on your coconut journey!

The coconut oil market size is valued at CAGR of 5.1%. The desiccated coconut powder market is projected to register a CAGR of 7.45%. The global coconut milk market at a CAGR of 17.3%. The global coconut water market size growth rate (CAGR) of 16.1%. The global activated carbon market is estimated at a CAGR of 9.3%. Coconut oil are widely consumed in food industries among other

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coconut products. Many Asian and European countries widely use coconut products in food and bakery industries. Rise in awareness about benefits and functional properties of coconut products including coconut oil is leads to increase in its demand in food industry across the globe. Increase in consumer preferences for organic ingredients to be used in their foods is anticipated to boost the demand for organic desiccated coconut powder, thereby offering remunerative opportunities for market expansion in the near future. Coconut milk/cream is processed and preserved in different ready to use forms, such as canned products, pouches, and dehydrated form. Coconut milk and cream are used mainly in food and bakery industry. In addition, it has also been used in cosmetics and personal care industries in the recent past and is expected to experience incremental demand in the near future. The aforementioned healthy ingredients make it the best rehydration drink, thereby increasing its adoption among gym-goers and athletes. Such health benefits are anticipated to boost the demand for coconut water across the globe.

A complete guide to the Coconut & Coconut Products Manufacturing: Coconut Cultivation, Manufacturing Process of Coconut Oil, Desiccated Coconut, Coconut Powder, Coconut Milk, Coconut Milk Powder, Copra, Coconut Chips, Coconut Water, Vinegar, Activated Carbon, Coconut Jam. It's a veritable feast of how-to information, from concept through equipment acquisition.

## Fertilizers Manufacturing Handbook

(Ammonium Sulfate, Diammonium Phosphate (DAP), Urea - Ammonium Nitrate, Neem Coated Urea, N.P.K. Complex Fertilizers, Single Superphosphate (SSP), Triple Superphosphate, Zinc Sulfate Monohydrate, Magnesium Sulfate with Manufacturing Process, Machinery Equipment Details & Factory Layout)

India's economy is heavily reliant on agriculture. One of the greatest contributors to the Gross Domestic Product is agriculture, along with forestry, fishing, and other related industries (GDP). It goes without saying that the fertilizer industry is one that the Indian economy cannot do without given how significant the agricultural sector is.

The success of the agricultural sector in India is largely dependent on the fertilizer industry. The benchmark that the food industry in India has set is mainly due to the many technically competent fertilizer producing companies in the country. The combined output of Nitrogenous (N) and Phosphatic (P) Chemical fertilizers has increased from a modest level.

Fertilizer Market Size will grow at a CAGR of 2.6%. Fertilizers have played a key role in the success of India's green revolution and subsequent self-reliance in food-grain production. The increase in fertilizer consumption has contributed significantly to sustainable production of food grains in the country.

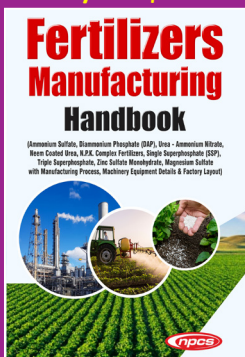
The NPK fertilizers market (feed-grade) is estimated at a CAGR of 4.1% these feed-grade fertilizers help animals attain faster growth and increase their weight by providing added nutrition to their meals.

The global diammonium hydrogen phosphate (DAP) driven by the product's rising usage in fertilizers to increase the crop yield. The compound has a high nutrient content which is required for crop nurture.

The global single superphosphate (SSP) market is expected to post a CAGR of close to 3%. Key factor driving the growth of the global single superphosphate (SSP) market is the increasing demand for phosphate fertilizers.

Triple Superphosphate Market is growing at a CAGR of 5.5%. Triple superphosphate typically contains 44-46% of diphosphorus pentoxide (P2O5) and are produced by reacting phosphoric acid with phosphate rocks.

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The zinc sulfate market is expected to witness market growth at a rate of 7.50%. The global nitrogenous fertilizer market size growth rate (CAGR). The growth is attributed to the increasing popularity of agriculture on a commercial level across the world.

The global potash fertilizer market growth rate (CAGR) of 4.66%. The Global Ammonium Phosphate Market is expected to grow at a CAGR of 3.56% mainly due to robust demands from animal feed and fertilizers industries. The market has witnessed a significant boost from the enabling policy framework regarding yield enhancement of agri-produce.

Successful business ideas in fertilizers manufacturing is profitable and very viable. Thus, it is a good idea to venture into it by starting your own business. Read this book on for more information about fertilizers industry in detail. It will help you understand how to get started with your own fertilizers manufacturing business. Fertilizers manufacturing is a great way to make money because of its high demand in today's market place.

The book contains detailed information about fertilizers manufacturing in which all aspects are covered. The book is of immense use to professionals in Fertilizers Manufacturing Handbook for quick revision as well as in day-to-day life where people would like to know about fertilizers. This book also serves as an excellent guide for those who want to venture into fertilizers manufacturing industry or have been associated with it.

A complete guide to the Fertilizers Manufacturing : Ammonium Sulfate, Diammonium Phosphate (DAP), Urea-Ammonium Nitrate, Neem Coated Urea, N.P.K. Complex Fertilizers, Single Superphosphate (SSP), Triple Superphosphate, Zinc Sulfate Monohydrate, Magnesium Sulfate. It's a veritable feast of how-to information, from concept through equipment acquisition.

# A Business Plan for Urea from Natural Gas

**U**rea production from natural gas is an innovative and efficient method for creating agricultural fertilizers. This process transforms methane from natural gas into ammonia, which is then processed into urea. Compared to traditional coal-based methods, this approach is more sustainable and cost-effective. It begins with extracting hydrogen from natural gas via steam methane reforming (SMR), then combining it with nitrogen from the air using the Haber-Bosch process to produce ammonia. Finally, ammonia is synthesized with carbon dioxide to form urea.

**Advantages**

- Abundant Supply of Natural Gas
- Cost-Effective Production
- High Yield and Purity
- Energy Efficiency
- Environmental Benefits
- By-Product Utilization

**Uses of Urea Produced from Natural Gas**

- **Fertilizer:** Urea is the most widely used nitrogen fertilizer in the world. It is favored for its high nitrogen content, which is essential for plant growth.
- **Diesel Exhaust Fluid (DEF):** Urea is used in DEF solutions for selective catalytic reduction (SCR) systems in diesel engines to reduce nitrogen oxide (NOx) emissions, improving air quality.
- **Melamine Production:** Urea is used to produce melamine, which is a component in the manufacture of laminates, coatings, and plastic products.
- **Medicines:** Urea is used in the formulation of certain pharmaceuticals, including topical creams and ointments for skin conditions, diuretics, and anti-cancer drugs.
- **Nutrient Supplement:** Urea is added to animal feed as a non-protein nitrogen (NPN) source, helping ruminants, like cattle, to efficiently digest and utilize feed.

- **Skin Care Products:** Urea is used in cosmetic products for its hydrating properties. It helps to maintain skin

moisture and is commonly found in lotions, creams, and shampoos.

**Global Market Outlook**

The global urea market size was valued at USD 128.92 billion in 2023 and is projected to grow from USD 123.95 billion in 2024 to USD 160.67 billion by 2032, exhibiting a CAGR of 2.2% during the forecast period. Commercially, ammonium carbamate is produced by reacting ammonia with carbon dioxide. Further, ammonium carbamate is decomposed to yield urea (carbamide) in solid form. As the product is enriched with nitrogen, it became a popular choice as a source of nitrogen in the fertilizer industry. Decreasing soil fertility due to natural and anthropogenic factors and increasing population are further demanding the use of effective solutions to increase crop yield, resulting in increased product demand.

**Why Should Start this Business?**

Investing in a urea from natural gas business taps into a confluence of promising factors. Primarily, the global urgency for sustainable agricultural practices makes this enterprise not just relevant but necessary. The shift toward green fertilizers aligns perfectly with the eco-friendly production process of urea from natural gas, appealing to a market increasingly conscious of environmental impacts. Furthermore, the anticipated growth in the fertilizer market, driven by the escalating food demands of a rising global population, positions urea at the heart of agricultural innovation and efficiency. With strategic planning and adherence to regulatory standards, businesses can leverage government incentives for sustainable practices, further enhancing profitability.

**Conclusion**

Startups are increasingly drawn to the urea from natural gas sector due to its promising growth prospects and the evolving landscape of global agriculture. The allure for new companies lies not only in the burgeoning demand for nitrogen-rich fertilizers but also in the innovative opportunities that the industry presents.

**PROJECT COST ESTIMATE**

CAPACITY	
Urea Fertilizer	: 100 MT Per Day
Plant & Machinery	: ₹ 16 Cr.
Cost of Project	: ₹ 33 Cr.
Rate of Return	: 26%
Break Even Point	: 62%

**F**iber Glass Tape is a material made from extremely fine fibers of glass woven into a tape form. It is renowned for its remarkable strength and durability, making it an invaluable component in various applications requiring reinforcement, insulation, and protection. This tape benefits from the inherent properties of fiberglass, including high tensile strength, thermal resistance, and electrical insulation. Its lightweight nature, combined with resistance to chemical attack, moisture, and adverse weather conditions, makes it an exceptional choice for both indoor and outdoor uses. Available in different widths and thicknesses, Fiber Glass Tape can be tailored to specific requirements, enhancing its versatility and utility across a multitude of sectors.

**Uses of Fiber Glass Tape**

- Drywall Repair and Reinforcement
- Sealing Joints and Cracks
- High-Temperature Applications
- HVAC Duct Sealing
- PCB Repair

**Opportunity in Fiber Glass Tape Business?**

Investing in a Fiber Glass Tape business offers a unique opportunity for entrepreneurs and investors alike to capitalize on a product with established demand, versatile applications, and an evolving landscape driven by innovation. The global reliance on Fiber Glass Tape across industries – from construction and automotive to aerospace and renewable energy – underscores a stable and expanding market potential. This widespread utility not only promises a broad customer base but also provides a cushion against market volatility, making it a relatively secure investment. The material's essential role in critical and emerging sectors translates to a steady demand, safeguarded by the continuous need for maintenance, repair, and innovation within these industries. These innovations not only enhance the product's performance but also align with the growing consumer and regulatory demands for sustainability, opening new markets and opportunities for business growth.

**Global Market Prospects**

The global Fiber Glass Tape market is poised for substantial growth, driven by increasing demand across a variety of sectors, including construction, automotive, aerospace, and renewable energy. This demand is fueled by the material's unparalleled versatility, durability, and resistance to environmental factors, making it a staple in both traditional industries and emerging technologies. Emerging markets, particularly in Asia-Pacific regions, are expected to contribute significantly to this growth, propelled by rapid industrialization and infrastructure development. North America and Europe continue to invest in renewable energy and energy-efficient technologies, further stimulating demand for Fiber Glass Tape. The trend towards sustainability and eco-friendly materials is also opening new avenues for growth, encouraging innovations in product development and manufacturing processes.

**Summary**

The Fiber Glass Tape business represents a compelling investment opportunity with its combination of market stability, potential for innovation, and alignment with future industry trends. It offers entrepreneurs a chance to build a profitable enterprise that not only meets the current demands but is also poised for future growth and success in the evolving landscape of materials science and technology.

**A Business Plan for Fiber Glass Tape**

**PROJECT COST ESTIMATE CAPACITY**

Fiberglass Tape	: 24,000 Mtrs. Per Day
Plant & Machinery	: ₹ 190 Lakhs
Cost of Project	: ₹ 442 Lakhs
Rate of Return	: 28%
Break Even Point	: 47%

**Market Survey Cum Detailed Techno Economic Feasibility Report on all above Businesses are Available. Contact :**

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Mob.: +91-9097075054 • 8800733955

Website : www.niir.org • www.entrepreneurindia.co • E-mail : info@niir.org • npc.india@gmail.com

**M**onocrystalline Silicon Ingots are cylindrical-shaped, single-crystal silicon structures created through a process that ensures uniformity in the crystal lattice structure throughout the ingot. This homogeneity is crucial for applications requiring high electrical efficiency and minimal defects. Monocrystalline Silicon Ingots stand at the forefront of renewable energy solutions, embodying the pinnacle of silicon purity and structural integrity. These ingots are crafted from a singular crystal structure of silicon, which distinguishes them from their polycrystalline counterparts. The singular crystal lattice that defines Monocrystalline Silicon Ingots is not only a testament to advanced manufacturing techniques but also to the ingot's superior efficiency and effectiveness in solar energy applications.

**A Business Plan for Monocrystalline Silicon Ingots**

**Uses and Applications**

The spectrum of uses and applications for Monocrystalline Silicon Ingots is vast and varied, extending far beyond the realm of solar energy generation. These ingots are the cornerstone for manufacturing the most efficient solar panels, but their utility is also paramount in the realm of electronics. Given their high purity and efficiency, Monocrystalline Silicon Ingots are integral in the fabrication of semiconductors, which are essential components in computers, smartphones, and various other electronic devices. Their exceptional electronic properties make them preferred materials in microelectronic applications, where performance and reliability are non-negotiable. Furthermore, the aerospace industry benefits from the unique

attributes of Monocrystalline Silicon Ingots. Spacecraft and satellites utilize solar panels crafted from these ingots, capitalizing on their superior efficiency and durability under extreme conditions. This ensures that space missions have access to reliable power sources, enhancing their operational longevity and performance. In the emerging field of electric vehicles (EVs), Monocrystalline Silicon Ingots play a critical role in power generation and storage solutions.

**Global Market Outlook**

The global solar ingot wafer market size was valued at USD 33.22 billion in 2022. The market is projected to grow from USD 39.75 billion in 2023 to USD 94.14 billion by 2030, exhibiting a CAGR of 13.1% during the forecast period. The growth of the automotive industry will drive the demand for solar bar wafers as they will be used in upcoming electric vehicles to store more energy and boost the vehicle's performance. The market growth is attributed to the growing adaptability of carbon emission in the transportation sector, as solar ingot wafers are the basic components of solar modules.

Solar PV is the most significant contributor to the growing renewable energy sources and is expected to provide two-thirds of renewables' growth in 2021. Global solar PV power generation is expected to increase by 145 terawatt hours and reach 1000 terawatt hours in 2021. An increase in electricity

generation from solar resources is estimated to increase the demand for solar panels and other equipment needed to build solar power plants. Solar bar wafers are used as raw materials for developing solar panels. Thus, installing solar panels to meet the rising electricity demand will propel the consumption of solar ingot wafers during the forecast period.

**Why to Entrepreneur Should Setup this Plant?**

Embarking on the journey to establish a Monocrystalline Silicon Ingots production plant opens a window of opportunity for forward-thinking entrepreneurs. The reasons to venture into this domain are multifaceted and compelling, ranging from tapping into a burgeoning market to securing a foothold in the renewable energy sector. The transition toward green energy solutions is accelerating, with solar energy at the forefront of this transformation. This global shift is not just a trend but a long-term movement, underscoring the growing demand for Monocrystalline Silicon Ingots. These materials are crucial for manufacturing high-efficiency solar panels, a cornerstone of sustainable energy systems. Entrepreneurs who seize this moment to start their production facilities will find themselves at the vanguard of an industry with expansive growth potential.

**Conclusion**

Entrepreneurs have a golden opportunity to tap into the burgeoning market for Monocrystalline Silicon Ingots by establishing plants dedicated to their production. With the renewable energy sector's growth, the value chain from ingot production to solar panel installation is expanding, opening up multiple revenue streams for entrepreneurs.

**PROJECT COST ESTIMATE CAPACITY**

<b>Monocrystalline Silicon Ingots</b>	<b>: 400 Kgs Per Day</b>
<b>Plant &amp; Machinery</b>	<b>: ₹ 178 Lakhs</b>
<b>Cost of Project</b>	<b>: ₹ 555 Lakhs</b>
<b>Rate of Return</b>	<b>: 28%</b>
<b>Break Even Point</b>	<b>: 45%</b>

**Start-Up Production Plant of Latex Mattress (Talalay Process)**

**L**atex mattresses are gaining popularity as an alternative to traditional spring or foam mattresses. A latex mattress is a mattress that is made from the sap of the rubber tree, which is known as "natural latex" or "Hevea milk." This material is then processed into either a solid foam or a combination of foam and air. The resulting material is extremely durable and offers great support for your body.

**Talalay Process**

The Talalay process is a unique way of producing latex mattress, and it is gaining in popularity in recent

years due to the superior quality of the mattresses it produces. The process was created in 1929 by Vitaly Talalay and involves a multi-step process that begins with extracting the liquid latex from the rubber tree. The liquid latex is then poured into a mould and cured in a vacuum chamber before being frozen to stabilize the cell structure of the latex. After being frozen, the latex is again heated and flash-frozen to create a more consistent product.

**Benefit of Starting Latex Mattress (Talalay Process) Business?**

Benefit of starting a latex mattress business is that you can make a great profit from the product's low overhead cost. Latex mattresses require minimal labour and material costs for production, making them more affordable than other types

of mattresses. This allows you to maximize your profit margins and offer customers competitive prices for the same quality product.

**Global Market Outlook**

The global latex mattress market size was accounted for USD 7.8 billion, in 2018 and is projected to grow at a significant rate over the forecast period, 2019-2025. Asia Pacific is anticipated to grow at the highest CAGR of 7.4% during the forecasted period. An increasing number of restaurants and hotels along with the growing hospitality industry in countries like China and India is projected to spur market growth. Consumers prefer these healthy products to support medical ailments. Additionally, growing infrastructure, rapid urbanization with luxurious lifestyle is expected to increase the demand for a latex mattress.

**Conclusion**

Latex mattresses are becoming increasingly popular due to their many benefits and affordability. Their eco-friendly nature and hypoallergenic properties make them ideal for those with allergies or sensitivities, while the Talalay process ensures that they are comfortable and breathable. Latex mattresses are relatively new to the market, entrepreneurs have an opportunity to gain a competitive edge over established mattress companies.

**PROJECT COST ESTIMATE CAPACITY**

<b>Latex Mattress Size</b>	<b>: 30 Nos. Per Day</b>
<b>75 x 70 x 5 inch (33Kg)</b>	
<b>Plant &amp; Machinery</b>	<b>: ₹ 88 Lakhs</b>
<b>Cost of Project</b>	<b>: ₹ 208 Lakhs</b>
<b>Rate of Return</b>	<b>: 31 %</b>
<b>Break Even Point</b>	<b>: 75 %</b>

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# Start Pharmaceutical Unit (Paracetamol Tablets)

**P**aracetamol, also known as acetaminophen in the United States and Canada, is a widely used over-the-counter medication designed to relieve pain and reduce fever. Available in tablet form, it is considered one of the most common and accessible medications across the globe. The active ingredient, paracetamol, works by inhibiting the production of certain chemicals in the brain that signal pain and heat, thus providing relief from various conditions such as headaches, muscle aches, arthritis, backaches, toothaches, colds, and fevers. Its efficacy, combined with a favorable safety profile when used according to guidelines, has solidified its status as a go-to choice for mild to moderate pain management and fever reduction in both adults and children.

### Benefits of Paracetamol Tablets?

The benefits of Paracetamol tablets extend beyond their primary functions of pain relief and fever reduction, making them an indispensable part of modern healthcare. One of the most significant advantages is their broad-spectrum efficacy. Paracetamol tablets are effective against a wide range of pains and aches, from minor conditions such as headaches and dental pain to more severe discomfort associated with osteoarthritis. Their ability to alleviate fever also makes them a go-to medication for those suffering from common colds and flu, providing relief from symptoms and helping to improve overall comfort during recovery. The tolerability of Paracetamol across various demographic groups adds to its benefits. It is suitable for most people, including pregnant and breastfeeding women, under medical advice, making it a universally accepted option for managing pain and fever.

### Production Process of Paracetamol Tablets

**1. Ingredient Weighing and Dispensing:** The first step involves accurately weighing and

dispensing the raw materials required for the production of Paracetamol tablets. This includes active pharmaceutical ingredients (APIs) and excipients such as binders, fillers, disintegrants, and lubricants.

**2. Mixing:** The weighed ingredients are thoroughly mixed to ensure uniform distribution of the API throughout the blend. This can be done using various types of mixers, such as high-shear mixers or tumbling blenders.

**3. Granulation:** Granulation can be performed using either a wet or dry process. Wet granulation involves the addition of a granulating liquid to form a cohesive mass, which is then granulated into small, uniform particles. In dry granulation, the ingredients are compacted and then broken down into granules.

**4. Drying (if wet granulation):** If wet granulation is used, the granules must be dried to remove any residual moisture. This is typically done in a fluid bed dryer or an oven, ensuring the granules reach the desired moisture content.

**5. Milling:** The dried granules are then milled to achieve the desired particle size distribution. This ensures a uniform granule size, which is crucial for consistent tablet weight and content uniformity.

**6. Lubrication:** The milled granules are mixed with a lubricant to prevent sticking during the tablet compression process. Common lubricants include magnesium stearate and stearic acid.

**7. Compression:** The lubricated granules are fed into a tablet press, where they are compressed into tablets of the desired shape and size. This step requires precise control to ensure

uniformity in tablet weight, hardness, and thickness.

**8. Coating (Optional):** Tablets may undergo a coating process to improve their appearance, mask the taste, or provide controlled-release properties. Coating is done using a film-coating or sugar-coating technique in specialized coating pans or machines.

**9. Quality Control Testing:** The produced tablets undergo rigorous quality control testing to ensure they meet all specified criteria, including weight uniformity, hardness, friability, disintegration time, and dissolution profile. Analytical methods like High-Performance Liquid Chromatography (HPLC) are used to verify the API content.

**10. Packaging:** The tablets that pass quality control tests are packaged into suitable containers, such as blister packs, bottles, or pouches. The packaging process ensures the tablets are protected from environmental factors like moisture and light.

**11. Distribution:** The final packaged products are labeled and distributed to wholesalers, pharmacies, hospitals, and other healthcare providers. Proper storage and handling during distribution are crucial to maintain the integrity and efficacy of the tablets until they reach the end user.

### Global Paracetamol Market

The global paracetamol market size is expected to be USD 126.2 million in 2022 and is projected to touch USD 119.52 million by

2031, exhibiting a CAGR of -0.6%. The global market outlook for paracetamol tablets remains robust and promising, driven by the widespread prevalence of pain-related conditions and the medication's ubiquitous use as an over-the-counter remedy for pain and fever relief. The market benefits from the rising geriatric population, growing awareness about pain management, and the cost-effectiveness of paracetamol. Despite regulatory challenges and increasing scrutiny over potential side effects, the demand continues to surge, particularly in developing regions where access to affordable healthcare solutions is crucial. Continuous innovations in formulation and delivery methods, along with expanding healthcare infrastructure, further bolster the market's growth potential, ensuring a steady upward trajectory in the coming years.

### Conclusion

Starting a Paracetamol Tablets manufacturing business presents a unique opportunity for startups looking to penetrate the pharmaceutical industry. This initiative is largely driven by the consistent demand for over-the-counter (OTC) pain relievers, with Paracetamol standing out due to its widespread acceptance as a safe and effective medication for reducing fever and relieving pain. Additionally, the relatively straightforward manufacturing process, coupled with low entry barriers in terms of initial investment and regulatory requirements, makes this venture attractive for new players.

### PROJECT COST ESTIMATE

CAPACITY	
Paracetamol Tablets (500mg)	: 25,000 No. of Strips Per Day
Plant & Machinery	: ₹ 37 Lakhs
Cost of Project	: ₹ 213 Lakhs
Rate of Return	: 34%
Break Even Point	: 51%

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# Start Production of Ferrotitanium Using Induction Furnace

**F**errotitanium using induction furnace is a specialized process that involves the melting and alloying of titanium and iron using an induction furnace. This advanced melting method utilizes electromagnetic fields to heat and melt the raw materials, producing Ferrotitanium—a vital alloy used to enhance the strength, durability, and corrosion resistance of steel. The induction furnace process stands out for its efficiency, precision, and environmental benefits. It allows for precise control over the temperature and atmosphere within the furnace, ensuring the production of high-quality Ferrotitanium that meets stringent industry standards. Unlike traditional furnace methods, induction melting minimizes energy consumption and significantly reduces the emission of harmful gases, making it a more sustainable option for alloy production. This technique not only supports the creation of superior quality Ferrotitanium but also aligns with the manufacturing industry's move towards greener and more energy-efficient practices.

## Applications of Ferrotitanium

Ferrotitanium is an alloy of iron and titanium with typical titanium content ranging between 20-75%. It is widely used in various industries due to its unique properties. Here are the primary applications of Ferrotitanium:

- Deoxidizing Agent
- Stabilizer
- Heat-Resistant Alloys
- Lightweight Structures
- Engine Components
- Body Panels
- Corrosion-Resistant Equipment
- Electronic Components

## Production Process

**1. Procurement of Raw Material:** The first step involves sourcing high-quality raw materials, including titanium scrap, steel scrap, and other alloying elements. These materials must meet specific quality standards to ensure the production of high-grade ferrotitanium.

**2. Crushing:** The procured raw materials are then subjected to a crushing process. This step reduces the size of the titanium and steel scrap, making it easier to handle and ensuring uniformity in the subsequent melting process.

**3. Thermal Degreasing:** The crushed materials undergo thermal degreasing to remove any oils, grease, or other contaminants. This step is crucial to prevent impurities from affecting the quality of the final product.

**4. Weighing:** After degreasing, the raw materials are accurately weighed according to the required composition of the ferrotitanium alloy. Precise weighing is essential to achieve the desired chemical properties in the final product.

**5. Melting:** The weighed materials are then charged into an induction furnace. The induction furnace uses electromagnetic induction to generate heat, melting the raw materials into a molten alloy. The temperature and melting time are carefully controlled to ensure a homogeneous mixture.

**6. Casting:** Once the melting process is complete, the molten ferrotitanium is poured into molds to form ingots or other desired shapes. The casting process must be carried out swiftly and efficiently to prevent any segregation or defects in the alloy.

**7. Powdering:** If the final application requires ferrotitanium in powder form, the cast ingots are further processed. This involves crushing and grinding the ingots into fine powder, ensuring the particles are of uniform size and shape.

**8. Testing:** The powdered or ingot ferrotitanium undergoes rigorous testing to verify its chemical composition, physical properties, and overall quality. This step ensures that the product meets industry standards and customer specifications.

**9. Packing:** After passing the quality tests, the ferrotitanium is carefully packed to protect it from contamination and damage during transportation and storage. The packing materials and methods are selected based on the product form (ingots or powder) and customer requirements.

**10. Storage:** Finally, the packed ferrotitanium is stored in a designated area under controlled conditions. Proper storage ensures the product maintains its quality until it is shipped to the customer or used in further applications.

By following these steps, high-quality ferrotitanium can be efficiently produced using an induction furnace, meeting the demands of various industrial applications.

## Why Should Start Ferrotitanium Industry?

Investing in the ferrotitanium market through the use of induction furnaces offers a wealth of opportunities for forward-thinking businesses. Ferrotitanium, an important alloy in various manufacturing and industrial processes, is prized for its strength, corrosion resistance, and lightweight properties. Utilizing induction furnaces for its production presents several advantages, including improved energy efficiency, reduced environmental impact, and enhanced product quality. These furnaces allow for precise temperature control and faster melting times, leading to increased productivity and lower production costs. Additionally, the demand for high-performance materials in aerospace, automotive, and construction industries continues to grow, further driving the need for quality ferrotitanium. Investing in this sector not only capitalizes on the current market demand but also aligns with sustainable manufacturing practices, offering a competitive edge in a rapidly evolving industrial landscape.

## Global Market Outlook

Ferrotitanium Market size was valued at USD 228.2 Million in 2021 and is estimated to reach USD 311.7 Million by 2028, growing at a CAGR of 4.5% from 2022 to 2028. The global market of Ferrotitanium is characterized by its dynamic growth, driven by the expanding steel industry and the increasing application of this alloy in various sectors. The production and consumption of ferrotitanium are highly concentrated in regions with robust industrial activities, particularly in Asia, Europe, and North America. China, being the largest producer and consumer of steel globally, plays a pivotal role in the ferrotitanium market, influencing prices and demand trends. Europe follows, with its advanced automotive and aerospace industries requiring high-quality ferrotitanium for manufacturing.

## Conclusion

Starting the Ferrotitanium industry, therefore, is not merely a bet on a single material but a strategic move that leverages broader trends in global manufacturing, technological innovation, and market demand for high-performance alloys. With its robust demand outlook, technological prowess, and critical role in key industries, the Ferrotitanium industry represents a compelling investment opportunity with the potential for significant returns.

## PROJECT COST ESTIMATE

### CAPACITY :

**Ferrotitanium 70** : 2,500,000 Kgs Per Annum

**Ferrotitanium 40** : 2,500,000 Kgs Per Annum

**Plant & Machinery** : ₹ 12 Cr.

**Cost of Project** : ₹ 60 Cr.

**Rate of Return** : 27%

**Break Even Point** : 35%

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106 E, Kamla Nagar, Delhi-110 007 (India). Tel. : 91-11- 23843955 • 23845886

Mob.: +91-9097075054 • 8800733955

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**P**oultry farming with manure treatment and egg tray production represents a comprehensive approach to agriculture that emphasizes sustainability and environmental stewardship. This method combines the raising of birds, such as chickens, ducks, and turkeys, primarily for eggs and meat, with innovative practices that address the by-products of poultry farming in eco-friendly ways. Manure treatment involves converting the waste produced by poultry into valuable resources like organic fertilizer or renewable energy, effectively turning potential environmental hazards into beneficial products. Simultaneously, the focus on sustainable egg tray production involves utilizing recycled materials to create packaging for eggs, reducing reliance on single-use plastics and minimizing waste. By integrating these practices, poultry farming becomes a more sustainable endeavor, mitigating its environmental impact while also enhancing productivity and efficiency.

**The Significance of Manure Treatment in Poultry Farming**

The process of manure treatment in poultry farming holds a pivotal role for multiple compelling reasons, beyond just waste management. Manure treatment processes transform poultry waste into a resource that enhances soil fertility and structure, promoting the growth of healthier crops. This transformation not only contributes to sustainable agriculture practices but also presents an opportunity for farmers to minimize their reliance on chemical fertilizers, which are often associated with long-term soil degradation and further environmental harm. Another vital aspect of manure treatment is its ability to curb greenhouse gas emissions, particularly methane and nitrous oxide, which are significantly more potent than carbon dioxide over a short period. Implementing strategies like anaerobic digestion in the manure management system can capture these gases for energy production, turning a potential pollutant into a clean energy source.

**Global Market Outlook**

The global market for poultry products, including eggs and meat, continues to exhibit strong growth, driven by increasing population, rising protein consumption, and the shift towards sustainable agricultural practices. As awareness and concern for the environment grow among consumers, the demand for products derived from eco-friendly and sustainable sources is expected to rise sharply. This shift is influencing market dynamics, with a

**Start Production of Poultry Farming with Manure Treatment & Egg Tray Production**

**PROJECT COST ESTIMATE**

<b>CAPACITY:</b>	
<b>Eggs Production</b>	: 40,000 Nos. Per Day
<b>Spent Hens</b>	: 1,000 Nos. Per Day
<b>Manure Pellets</b>	: 3,500 Kgs. Per Day
<b>Egg Tray Production</b>	: 10,000 Nos. Per Day
<b>Plant &amp; Machinery</b>	: ₹ 324 Lakhs
<b>Cost of Project</b>	: ₹ 684 Lakhs
<b>Rate of Return</b>	: 28%
<b>Break Even Point</b>	: 54%

significant push towards the integration of manure treatment processes and sustainable egg tray production in the poultry farming industry. Emerging economies, in particular, present vast opportunities for expansion, as urbanization and income growth spur demand for poultry products. Additionally, technological advancements in manure treatment and recycling processes are poised to open new markets, offering innovative solutions for waste management and organic fertilizer production.

**Why Invest in this Business?**

Starting the integration of poultry farming with advanced manure treatment and sustainable egg tray production represents a visionary move toward the future of agriculture. This business model not only caters to the growing global demand for poultry products but also aligns with the increasing consumer preference for sustainability and environmental responsibility. From a financial perspective, the dual focus on waste management through manure treatment and the production of eco-friendly egg trays opens up diversified revenue streams. This includes the sale of organic fertilizers, renewable energy generation, and the supply of biodegradable packaging solutions, each of which taps into lucrative markets with high growth potential. Investment in poultry farming with an emphasis on manure treatment and sustainable egg tray production is not just financially appealing but also ethically rewarding, promising a sustainable future for the agriculture industry.

**Final Thought**

Investing in the integration of poultry farming with advanced manure treatment and sustainable egg tray production represents a visionary move toward the future of agriculture. This business model not only caters to the growing global demand for poultry products but also aligns with the increasing consumer preference for sustainability and environmental responsibility. Investing in this sector, stakeholders contribute to positive environmental and social impacts, fostering goodwill and strengthening brand reputation among consumers who prioritize ethical and eco-conscious brands.

**A Business Plan for Glass Fiber Reinforced Polymer (GFRP) Rebar**

**G**lass fiber reinforced polymer (GFRP) rebar is a type of composite rebar made from high-strength glass fibers embedded in a resin matrix. It is a relatively new product that has been developed for use in the construction industry as a substitute for steel rebar. GFRP rebar has several advantages over traditional steel rebar, including greater corrosion resistance and a lower cost.

**Scope of Start-up in Glass fiber reinforced polymer rebar Manufacturing Industry**

The scope for start-up in Glass Fiber Reinforced Polymer (GFRP) rebar manufacturing industry is immense, as the global construction industry is projected to expand at a rapid pace in the years to come. GFRP rebar is gaining popularity as a replacement for traditional steel reinforcement due to its superior corrosion resistance, lightweight, and lower cost. The advantages of using GFRP rebar can help in cutting down the costs of construction, making it attractive for contractors to switch to GFRP rebar over steel.

**Uses and Application**

Glass fiber reinforced polymer rebar (GFRP) is a type of reinforcing bar used in the construction industry. This material is composed of glass fibers, epoxy resin, and other additives.

**Global Market Outlook**

Glass fiber reinforced polymer (GFRP) is widely used in the construction industry for non-structural elements, such as facade, panels, piping, and channels. The Asia-Pacific region has become an attractive market for the investors, owing to the presence of a number of emerging economies, such as India, China, Indonesia, Vietnam, and others in the region.

**Conclusion**

The scope of starting a GFRP rebar manufacturing business is excellent and provides a great opportunity for entrepreneurs to capitalize on the increasing demand of green building materials. With the right knowledge and resources, one can reap the benefits of this growing market in no time.

**PROJECT COST ESTIMATE**

<b>CAPACITY</b>	
<b>Glass Fibre Reinforced Polymer (GFRP) Bar (Size 8mm to 36 mm)</b>	: 360,000 MT Per Annum
<b>Plant &amp; Machinery</b>	: ₹ 6 Crore
<b>Cost of Project</b>	: ₹ 61 Crores
<b>Rate of Return</b>	: 34 %
<b>Break Even Point</b>	: 51 %

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 Mob.: +91-9097075054 • 8800733955  
 Website : www.niir.org • www.entrepreneurindia.co • E-mail : info@niir.org • npc.s.india@gmail.com

## Start Lithium Ion Battery (Battery Assembly) Manufacturing plant

**A** lithium ion battery (Battery Assembly) is a rechargeable battery that is typically used in portable electronic devices such as cell phones, laptops, and tablets. Lithium ion batteries have become increasingly popular due to their high energy density, long life cycle, and low self-discharge rate.

### Opportunity for Lithium Ion Battery Startups

The increasing demand for energy storage solutions in the industrial, automotive, and consumer sectors have made lithium ion batteries a promising business opportunity.

### Indian Market Outlook

The India lithium-ion Battery Market was valued at US\$ 1.91 Bn. in 2021 and is estimated to reach a value of US\$ 5.2 Bn. in 2029. The Global India lithium-ion Battery Market size is estimated to grow at a CAGR of 15.3% over the forecast period.

### Global Market Outlook

The global lithium-ion battery market size was valued at USD 41.97 billion in 2021 and is expected to expand at a compound annual growth rate (CAGR) of 18.1% from 2022 to 2030.

### Conclusion

The lithium ion battery (Battery Assembly) industry is an ever-evolving one that offers exciting opportunities for Startups and established companies alike. With advances in technology and manufacturing, these batteries are becoming increasingly popular as an energy source. They offer an efficient and cost-effective way to store and use energy, making them a great option for many applications. Overall the lithium ion battery industry has a bright future.

### PROJECT COST ESTIMATE

#### CAPACITY:

48 Volt, 60 AH Lithium-Ion Battery Pack	: 500 Nos. Per Annum
48 Volt, 80 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
48 Volt, 100 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
60 Volt, 20 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
60 Volt, 30 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
72 Volt, 20 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
72 Volt, 40 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
12.8 Volt, 8 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
12.8 Volt, 12 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
12.8 Volt, 20 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
12.8 Volt, 30 AH Lithium-Ion Battery Pack	: 400 Nos. Per Annum
Plant & Machinery	: ₹ 86 Lakhs
Cost of Project	: ₹ 516 Lakhs
Rate of Return	: 27 %
Break Even Point	: 60 %

## Setup Plant of Glass Sheet & Float Glass

**G**lass Sheet & Float Glass is a type of flat glass that is made by melting sand and soda ash, which is then cast onto molten tin. The glass is then formed into sheets and float-cooled on molten metal. Float glass has a smooth, uniform surface, and is used to make products such as windows, doors, mirrors, and table tops. Glass Sheet & Float Glass is a form of plate glass made from silica sand, soda ash, and limestone, which is then heated to extremely high temperatures and then cooled rapidly to create a flat glass surface.

### Scope for Startups in the Glass Sheet & Float Glass Industry

The glass sheet and float glass industry has seen significant growth in recent years, and this trend is expected to continue in the coming years. This creates an excellent opportunity for entrepreneurs to get involved in the glass sheet and float glass industry and take advantage of the growing demand.

### Global Market Outlook

The global market size of glass sheet and float glass is estimated to reach \$9 billion by 2027, with an expected CAGR of 8.5% over the forecast period. The global market for glass sheets and float glass is booming.

### Conclusion

There are plenty of opportunities for Startups to become involved in the glass sheet and float glass industry. With the right strategy, Startups can capitalize on the growing demand for these products and services and establish a strong presence in the industry.

### Uses and Applications

Glass sheets and float glass are versatile materials that can be used in a variety of ways. They are commonly used for windows, doors, skylights, and other architectural features in homes and commercial buildings.

### PROJECT COST ESTIMATE

#### CAPACITY:

Float Glass 8mm	: 1,500,000 Sq.mt. Per Annum
Sheet Glass 4mm	: 3,000,000 Sq.mt. Per Annum
Plant & Machinery	: ₹ 261 Crores
Cost of Project	: ₹ 346 Crores
Rate of Return	: 14 %
Break Even Point	: 43 %

**A**scorbic acid, also known as vitamin C, is an essential nutrient that the body does not produce naturally but must obtain from outside sources to stay healthy. Because it performs so many functions, taking in enough vitamin C every day can be difficult if you're not aware of what it does and where you can find it. Vitamin C helps your body form collagen, boosts your immune system, helps wounds heal faster and reduces the chance of certain cancers developing by neutralizing free radicals in your body.

Based on grade, the global ascorbic acid market has been segmented into pharmaceutical grade and food grade. Food grade segment is expected to register significant revenue growth over the forecast

## Manufacturing of Ascorbic Acid (Powder) from Sorbitol

period owing to increasing demand for food and beverages fortified with vitamin C, rising use of ascorbic acid as food additive and acidity regulator, and as a main source of vitamin C in supplements.

Asia Pacific market revenue is expected to expand at a CAGR of 5.5% during the forecast period owing to increasing manufacturing of vitamin C, increasing investment in R&D activities to develop effective vitamin C supplements, rapidly growing

food and beverage industry due to increasing focus on functional foods and rapid urbanization, changing lifestyle and increasing disposable, and growing demand for vitamin C-enriched cosmetic products.

### PROJECT COST ESTIMATE

#### CAPACITY:

Ascorbic Acid (Powder)	: 8.3 MT Per Day
Carbon Di-oxide by Product	: 11.6 MT Per Day
Sodium Hydroxide by Product	: 7.7 MT Per Day
Plant & Machinery	: ₹ 803 Lakhs
Cost of Project	: ₹ 2444 Lakhs
Rate of Return	: 29%
Break Even Point	: 48%

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**A** vacuum blood collection tube is a sterile glass or plastic test tube with a stopper that creates a vacuum inside the tube so that a preset volume of liquid can be depicted. By avoiding needles from coming into contact with humans and so being contaminated, the vacuum blood collection tube avoids needle stick injuries. A double-pointed needle is fitted to a plastic tubular adapter in the vacuum blood collecting tube. Double-pointed needles come in a variety of gauge sizes. The needle's length varies from 1 to 1 1/2 inches. Additional elements may be present in vacuum blood collection tubes, which are used to preserve blood for treatment in a medical laboratory. These additives come in the form of ultrasonic nozzle-applied films.

Clinics and laboratories commonly utilise a vacuum blood collection tube to store blood for future testing. An alternative for vacuum blood collection tubes has been developed that can store blood for testing purposes for a prolonged period of time. Vacuum blood collection tubes come in a variety of sizes and specimen kinds. When the needle

# Manufacturing Business of Blood Collection Tubes

punctures the cap of a blood collection tube, the vacuum is dissipated over time, and blood is not pulled into the tube.

Blood Collection Tubes Market is expected to reach \$2.81 billion by 2025, with a CAGR of 7.1 percent from 2020 to 2025. Many disorders require the use of blood in their diagnosis and treatment. The collection, storage, and management of blood after it has been obtained from a donor are all part of the blood processing process. The blood collection tubes, also known as vacutainers,

are disinfected and have a safety-engineered stopper with multiple labelling options with the volume on it and the colour of the caps shows the additives in the tube. The need for blood collection tubes is being driven by the increased use of blood samples in diagnostics and the requirement for blood components in the treatment of numerous disorders.

### PROJECT COST ESTIMATE

CAPACITY:	
Blood Collection Tubes 13x100 with EDTA	: 100,000 Nos Per Day
Blood Collection Tubes 13x75 Plain	: 100,000 Nos Per Day
Plant & Machinery	: ₹ 345 Lakhs
Cost of Project	: ₹ 983 Lakhs
Rate of Return	: 30%
Break Even Point	: 51%

Market Survey Cum Detailed Techno Economic Feasibility Report on all above Businesses are Available. Contact :

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# SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

## EACH DETAILED PROJECT REPORT (BUSINESS PLAN) CONTAINS



**Market Survey Cum Detailed Techno Economic Feasibility Reports**



**BEGINNING** : Project Introduction, Brief History of the Product, Properties, BIS (Bureau of Indian Standard) Specifications & Requirements, Uses & Applications.

**MARKET SURVEY** : Present Market Position, Expected Future Demand, Statistics of Imports & Exports, Export Prospect, Names and Addresses of Existing Units (Present Manufactures).

**PLANT & MACHINERY** : List of Plant & Machineries, Miscellaneous Items and Accessories, Instruments, Laboratory Equipments and Accessories, Plant Location, Electrification, Electric Load and Water, Maintenance, Suppliers/Manufacturers of Plant and Machineries.

**RAW MATERIAL** : List of Raw Materials, Properties of Raw Materials, Availability of Raw Materials, Required Quality of Raw Materials, Cost/Rates of Raw Materials.

**MANUFACTURING TECHNIQUES** : Formulae Detailed Process of Manufacture, Flow Sheet Diagram.

**PERSONNEL REQUIREMENTS** : Requirement of Staff & Labour, Personnel Management, Skilled & Unskilled Labour.

**LAND & BUILDING** : Requirement of Land Area, Rates of the Land, Built up Area, Construction Schedule, Plant Layout.

**FINANCIAL ASPECTS** : Cost of Raw Materials, Cost of Land & Building, Cost of Plant & Machineries, Fixed Capital Investment, Working Capital, Project Cost, Capital Formation, Cost of Production, Profitability Analysis, Break Even Point, Cash Flow Statement for 5 to 10 Years, Depreciation Chart, Conclusion, Projected Balance Sheet, Land Man Ratio.

- Prepared by highly qualified and experienced consultants and Market Research and Analyst Supported by a panel of experts and computerised data bank.
- Data provided are reliable and upto date collected from suppliers/manufacturers, plants already commissioned in India.
- NPCS Reports are very economical and immediately available on demand where as commissioned Feasibility Studies are time consuming and costly.

**FOR ASSESSING MARKET POTENTIAL, INVESTMENT DECISION MAKING CORPORATE DIVERSIFICATION PLANNING ETC.**

NPCS Engineers and Consultants have prepared Market Survey Cum Detailed Techno Economic Feasibility Report on the following products which are most viable and profitable.

## Business Ideas: Upto 25 Lakhs (Plant and Machinery) : Selected Project Profiles for Entrepreneurs, Startups



- » Connecting Rod Mk2 (Electro Galvanized) for Hand Pump
- » A4 and A3 Size Paper
- » Activated Carbon (by Steam Activation Process)
- » Activated Carbon from Saw Dust
- » Adhesive (Fevicol Type)
- » Adhesive from Maize Starch
- » Atta Chakki Plant
- » Ayurvedic /Herbal Hand Sanitizer
- » Ayurvedic Pain Balm



- » Baby Cereal Food
- » Baby Wet Wipes and Facial Wet Tissue
- » Banana Powder
- » Battery Sprayer
- » Biodegradable Plastic Bags from Corn & Cassava Starch Granules
- » Biodegradable Plastic Bags from Corn Starch
- » Biofertilizer from Birds Excreta
- » Bricks from Fume Dust



- » Micronutrient Fortified Energy Dense Food
- » Caffeine from Tea Waste
- » Calcium & Zinc Stabilizer for Pipe and Foam Board Application
- » Cashew Nut Shell Oil
- » Cold Pressed Rice Bran Oil (Edible Oil)
- » Copper Wire Drawing, Annealing & Enamelling
- » Corrugated Galvanized Sheet
- » Cow Urine (Gomutra) Processing and Packing

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# SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

- » Dairy Farming for Milk
- » Dall/Pulse Mill
- » Detergent Cake & Powder
- » Disposable Plates from Banana Leaves
- » Eggshell Powder
- » English Willow Cricket Bat
- » Essential Oil Extraction (Jasmine and Tuberose)
- » Exercise Note Book & Registers, Pads and File
- » Exercise Note Book and Register
- » Extraction of Essential Oil and Packing of Ground Spices
- » Extraction of Neem Oil
- » Extraction of Oil from Rajnigandha
- » Filtration and Airtight Packing of Coconut Oil
- » Filtration and Airtight Packing of Coconut Oil
- » Flexographic Printing
- » Fuel Bricks from Ground Nuts, Soyabean Hulls and Jute
- » Ginger Oil
- » Glass Fiber Reinforced Polymer (GFRP) Rebar Manufacturing Business
- » Goat Farming for Meat and Breeding Cattle Breeding Farm, Fodder, Livestock Farming
- » Rice Husk Based Biodegradable Cutlery
- » Gutkha & Pan Masala
- » Hand Sanitizer
- » High Temperature Aluminium Based Paint
- » Hydraulic Hoses for Heavy Earth Movers
- » Hydroponic Green House Farming
- » Instant Noodles
- » Insulator (Made By Fiber Glass & Reinforced Plastics By Hand Moulding Press)
- » Iron Powder from Mill Scale Scrap
- » Jute Shopping Bags
- » Ladies Under Garments (Bra & Panties)
- » Liquid Glucose from Maize
- » Liquid Hand Wash
- » Liquid Organic Fertiliser (Biofertiliser)
- » M.S. Welding Electrodes
- » Macaroni, Vermicilli & Noodles Manufacturing
- » Magnesium Sulphate
- » Mango Pickles
- » Basic Violet 10 (Rhodamine B Base)
- » Mayonnaise
- » Meat Analogue, Vegan Meat & Mock Meat from Soyabean and Wheat Gluten
- » Micronutrients Fertilizer
- » Micronutrients Fertilizer for Banana, Vegetables and Citrus
- » Mineral Wool Ceiling Tiles
- » Moringa Leaf Tablets
- » Mosquito Repellent Liquidator, Vaporiser (All Out Type)
- » Namkeen (Dalmoth, Bhujia, Chana Chur, Khatta Meetha)
- » Natural Tanning Powder
- » Neem Oil (Cold Process)
- » Non Asbestos Jointing Sheet
- » Non Glazed Ceramic Tiles
- » Non-formaldehyde Dye Fixing Agent for Reactive Dyes
- » Pan Masala
- » Pan Masala Sada, Meetha & Zarda
- » Pan Masala, Gutka & Pouch Making Plant
- » Pan Masala, Tobacco, Zarda & Kimam
- » Pan Masala, Zarda, Khaini, Gutka, Sweet & Scented Supari
- » Paracetamol
- » Pectin from Citrus, Lemon and Oranges
- » Plaster of Paris Emulsion
- » Poly Aluminium Chloride
- » Potassium Chloride
- » Micronutrients Fertilizer
- » Medical Disposables (Gowns/Drapes)
- » PVA Adhesive (Fevicol Type) -
- » Ready Mix Coating Powder used for Coating of Pharmaceuticals Tablets for Regular Fill Coating and Functional Film Coating
- » Readymade Garments (T-shirt)
- » Readymade Garments
- » Readymade Khaini (Geeli)
- » Refrigerant Gas R22 Bottling Plant
- » Rewinding of Burnt Electric Motors
- » Sanitary Napkin (Low Investment Project)
- » Sanitary Napkins
- » School (CBSE Pattern)
- » Premix Tea and Coffee Cappuccino, Vanilla Flavoured Coffee, Mocha Coffee, Masala Chai, Ginger Tea & Green Tea (for Diabetic and Non Diabetic)
- » Silica Gel Crystal & Beads
- » Sodium Chlorite Liquid from Powder (31% Liquid NaClO<sub>2</sub>)
- » Sodium Silicate from Soda Ash and Silica Sand
- » Spice Oil Extraction from Curry Leaves (100% EOU)
- » Spice Powder (Turmeric, Chilli, Pepper, Coriander and Cumin Powder)
- » Spices (100 % EOU)
- » Spices (Masala)
- » Spices (Turmeric Powder, Red Chilli Powder, Dhaniya Powder, Garam Masala, Sabji Masala, Popcorn Masala)
- » Spices in Pouch Packing
- » Stable Bleaching Powder
- » Ferric Pyrophosphate (Food Grade/ Pharma Gade)
- » Trading/Export of Spices (Coriander, Chilli, Turmeric & Cumin) Business
- » Sterile Water for Injection
- » Sugarcane Juice Preservation
- » Surgical Cotton & Bandages
- » Surgical Cotton
- » Tailoring Chalk (Triangle Pattern)
- » Tennis Ball (Used in Playing Cricket)
- » Tomato Products
- » Tundish Insulated Powder (radex)
- » Turmeric, Dhania and Chilli Powder
- » Urea Formaldehyde Uf 85
- » Virgin Coconut Oil
- » Washing Powder
- » Whole Spices Processing (Cleaning / Grinding & Packaging)
- » Wire Drawing Lubricants
- » Wire Nail
- » Wire Nail & Wire Drawing Plant
- » Workshop for Motors of Low Voltage (up-to 1000V) and Distribution Transformers (Maintenance, Overhauls and Repairs)
- » Carbon Fiber, Carbon Fiber Composites, Graphite Fibre and Carbon Fiber Reinforced Polymer Projects
- » Carbon Fiber
- » Carbon Fiber Composites
- » Cellulose Fiber
- » Cold Storage
- » Production of Carbon Black
- » Production of Composite Materials

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**E**rickshaws are three wheel battery operated vehicles, which are considered as an upgrade to conventional rickshaws, and economically better than auto rickshaws and other fuel variants, these rickshaws, since are battery powered have zero emission,

for an e-rickshaw driver and hence it is an important means of livelihood for many. These e-rickshaws consist of 3 wheels with a differential mechanism at rear wheels. Basically these vehicles have a mild steel tubular chassis.

### Advantages of E-Rickshaws

- **Eco-Friendly** – E-Rickshaws can be the best alternative to petrol or diesel run vehicles as they are operated on battery. These rickshaws do not emit smoke and thus, will not contribute to the increasing air pollution. The batteries which will be used for the functioning of these rickshaws can be effectively recycled and thus, will solve the problem of battery disposal.

- **Economical** – E-rickshaws are comparatively cheap and can be easily afforded by a common man. Passengers will have to pay a less transport charge. It is cost effective not only for the consumers but also for the owners. The batteries can be easily recharged from home or from any place that provides a proper voltage.

- **Free from Noise Pollution** – E-rickshaws are free from creating noise pollution as they do not emit any sound. Passengers can have a smooth and comfortable ride.

- **Livelihood** – E-rickshaws provide a means of livelihood for the common as well as illiterate people. Without investing much of

money, the e-rickshaw drivers can earn a good livelihood.

- **Safety** – E-rickshaws involve less risk when compared to the other fuel operating vehicles. They can cause less accident as they are slower and lighter than an auto rickshaw. There is a chance of explosion in the case of fuel operating vehicles.

- **Easy Maintenance** – As they use electricity, they do not require fuel to operate the engines. E-rickshaws are free from an engine and a gear box and thus, the burden of maintenance is reduced. The motor which is used in these rickshaws is smaller and the battery is placed below it. Hence, maintaining them is quite easier.

The global e-Rickshaw market is projected to expand at around 9% CAGR during the upcoming period. The growth of the market is attributed to low cost of transportation and low power consumption. E-rickshaws are widely accepted as an alternative to diesel, petrol, CNG auto rickshaws. Increasing awareness about the air pollution and other environmental issues which can be reduced by using the e-rickshaws. In the e-rickshaw the main electronic components that make the drive are controller, motor, batteries, harness and throttle. The mismatch between any of these components is nasty and may reduce performance. The global e-Rickshaw market is projected to expand at around 9% CAGR during the period. The growth of the market is attributed to low cost of transportation due better mileage and low power consumption. Increase in sales and production of electric vehicles as an alternative for fuel-based mobility, owing to several government initiatives and environmental regulations on the electric vehicle industry, is projected to drive the e-rickshaw market.

## Demanding Business of E-Rickshaw Assembling

and is often argued to be much better than other rickshaws as they are considered almost pollution free. An E rickshaw is now fairly popular rickshaw drivers and has created new opportunities for people, as they require minimum investment to earn a living. They offer huge returns in less time, and are easy to operate and have low maintenance and running cost.

E rickshaws are now one of the preferred modes of transport in streets because of its low maintenance cost, low fuel cost, Eco-friendly, no noise pollution, easy to drive and last but not the least livelihood, e-rickshaw is a boon to the common man. Without putting in much physical efforts and without investing much amount of money, the earning is quite good

### PROJECT COST ESTIMATE CAPACITY

<b>E-Rickshaw</b>	: 200 Nos Per Day
<b>Plant &amp; Machinery</b>	: ₹ 2.06 Cr.
<b>Cost of Project</b>	: ₹ 25.80 Cr.
<b>Rate of Return</b>	: 30%
<b>Break Even Point</b>	: 68%

illiterate people. Without investing much of

**P**ea protein isolate and concentrate are derived from yellow peas. These products are a vegan-friendly and plant-based alternative to animal-based proteins like whey and casein. Pea protein isolate is a highly refined form of pea protein that is free from fats, carbohydrates, and fiber. This product has a protein content of up to 90%. Pea protein concentrate, on the other hand, is less refined and contains some carbohydrates and fiber. Its protein content ranges from 60-80%. Pea protein isolate and concentrate are ideal for people with food sensitivities or allergies, especially those who are lactose intolerant. It is also a sustainable option as it does not require as much land or water as animal-based proteins.

### Indian Market Outlook

The Indian market outlook for pea protein isolate and concentrate

## Setup Plant of Pea Protein Isolate/Concentrate

is promising. The demand for plant-based protein sources is growing in India, and pea protein has gained popularity as a viable alternative to traditional animal-based protein sources. The market for plant-based protein in India is expected to grow at a

significant rate in the coming years. The growing awareness of the health benefits of plant-based diets and the increasing demand for vegan and vegetarian products are driving the growth of the plant-based protein market in India.

### Global Market Outlook

The global pea protein market size was USD 416.39 million in 2020 and is projected to grow from USD 464.60 million in 2021 to USD 1,026.12 million by 2028 at a CAGR of 12.0% during the 2021-2028 period. Pea is a leguminous plant in which the pea seeds comprise huge amounts of protein (20- 30%). It mainly exists as globulins, which are the main

components in Pea Protein Isolate (PPI) products. Protein from peas can be produced based on wet-milling and dry-milling technologies, with protein content ranging from 48% to 90%. Nutritional benefits, oil-binding capacity, water-binding capacity, foam stability, foam expansion, whip ability, emulsion stability, gelatin, and emulsion ability ratio are essential functional properties of PPI and concentrates.

### Conclusion

With the growing trend of health and fitness, the sports nutrition market is also contributing to the boom in the pea protein isolate and concentrate business. The future looks bright for pea protein isolate and concentrate in the food and beverage industry as it offers a high-quality, cost-effective, and versatile plant-based protein option that consumers can enjoy without sacrificing taste or quality.

### PROJECT COST ESTIMATE

<b>CAPACITY:</b>	
<b>Pea Protein Isolate</b>	: 2 MT Per Day
<b>Spent Pea for Cattle Feed : 8 MT Per Day by Product</b>	
<b>Plant &amp; Machinery</b>	: ₹ 118 Lakhs
<b>Cost of Project</b>	: ₹ 614 Lakhs
<b>Rate of Return</b>	: 27 %
<b>Break Even Point</b>	: 54 %

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**L**ab Cultured Diamonds are real diamonds created from a laboratory environment. They are identical in their physical, chemical and optical properties to naturally-occurring diamonds. Lab Cultured Diamonds are created by placing graphite under high pressure and temperature and allowing the graphite to transform into diamonds. This process takes place in a laboratory, instead of occurring naturally in the Earth's crust.

**Process of Lab Cultured Diamonds from graphite**

The process of transforming graphite into diamonds is called chemical vapor deposition (CVD). The process involves a special machine that breaks down the graphite atoms and bonds them together to form a diamond structure. The resulting product is chemically and physically identical to diamonds created by nature. Lab Cultured Diamonds are cut, polished and graded in the same way as natural diamonds. They are available in all the usual cuts, colors and clarity grades. These stones are available in various sizes and carat weights, and can be set in any type of jewelry setting.

**Benefits of Starting Lab Cultured Diamonds Business**

Starting a business in Lab Cultured Diamonds

## A Business Plan for Lab Cultured Diamonds from Graphite

offers many advantages over traditional diamond mining. LCDs don't require mining, so there's no need to disrupt ecosystems or risk worker safety. Furthermore, they are produced quickly and on demand with consistent quality, meaning that companies can be confident in their product's reliability. Additionally, there is no need for expensive certification processes for these diamonds, making them an attractive choice for customers looking for an affordable alternative to traditional diamonds.

**Market outlook**

According to a report by Allied Market Research, the global lab-grown diamond market size was valued at \$16.2 billion in 2019 and is expected to reach \$29.8 billion by 2027, growing at a compound annual growth rate of 7.8% from 2020 to 2027. This growth is driven by increased consumer demand for sustainable and ethically-sourced diamonds, as well as advancements in diamond-growing technology that have made lab-

grown diamonds more affordable and accessible.

Overall, the lab-grown diamond industry has a bright future and is expected to continue to grow as consumers become more conscious of the environmental and ethical impacts of their purchases, and as technology

continues to improve the quality and affordability of lab-grown diamonds

**Conclusion**

Starting a business in Lab Cultured Diamonds provides entrepreneurs with the opportunity to be part of a growing and innovative industry. As more people become aware of this technology and its advantages, the demand for LCDs is likely to increase, giving entrepreneurs the chance to capitalize on this emerging trend.

**PROJECT COST ESTIMATE CAPACITY**

Lab Cultured Diamonds : 30 Carat Per Day (1 Carat)	
Plant & Machinery	: ₹ 200 Lakhs
Cost of Project	: ₹ 361 Lakhs
Rate of Return	: 25 %
Break Even Point	: 57 %

## Start Printed Circuit Board (PCBs) Manufacturing Business

**A** Cosmetic Unit is a combination of products that typically include serum, cream, shampoo, and lipstick. This bundle of beauty products caters to the daily beauty routine of both men and women. It provides everything they need for basic skincare and hair care. The cosmetic industry is ever-changing and always looking for new trends and innovative ideas. There is an increasing demand for natural and organic products, which is why a Cosmetic Unit is a great business opportunity.

**Why Should Entrepreneur Invest In This Industry?**

**Growing Demand:** The cosmetic industry has seen a steady increase in demand over the years, and the trend is expected to continue.

**High-Profit Margins:** The cosmetic industry is known for its high-profit margins, especially for premium and luxury brands. With the right marketing and branding strategies, entrepreneurs can create a profitable business in this industry.

**Innovation:** The cosmetic industry is constantly evolving, with new technologies and ingredients

being developed to create innovative products.

**Global Market Outlook**

The global cosmetics market size was valued at USD 262.21 billion in 2022 and is expected to expand at a compound annual growth rate (CAGR) of 4.2% from 2023 to 2030. One of the key factors driving the market expansion during the forecast period is the widespread increase in the adoption of skincare and personal care products along with the rise in the global aging population. Rising fashion trends and considerable product innovation in hair color and other skincare product formulations and packaging all contribute to the market's expansion. The global cosmetics industry is further classified into skincare, haircare, makeup, fragrance, and others (hygiene and personal care products). Among these, the skincare segment contributed

to a larger market share of more than 38% in 2022.

**Conclusion**

A Cosmetic Unit provides a comprehensive solution to daily beauty routines. With high-profit margins, an evergreen market, and growing demand for natural and organic products, it's an excellent business opportunity for entrepreneurs.

**PROJECT COST ESTIMATE CAPACITY:**

<b>Serum</b>	: 666.6 Nos Per Day
<b>Cream</b>	: 2,000 Nos Per Day
<b>Shampoo</b>	: 4,000 Nos Per Day
<b>Lipstick</b>	: 10,000 Nos Per Day
Plant & Machinery	: ₹ 46 Lakhs
Cost of Project	: ₹ 1617 Lakhs
Rate of Return	: 36 %
Break Even Point	: 37 %

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