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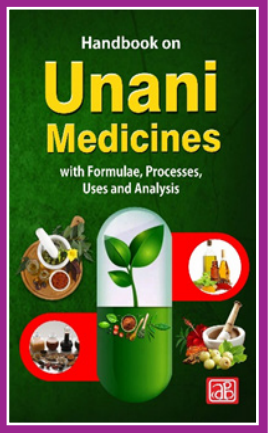
About Us

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.

Handbook on Unani Medicines with Formulae, Processes, Uses and Analysis (2nd Revised Edition)

₹1695/- $150-



In India, the Unani System of Medicine has a long and illustrious history. The Arabs and Persians introduced it to India probably in the seventh century. In terms of the practice of Unani Medicine, India is currently one of the top countries. The Unani System of Medicine treats disorders that affect all of the human body's systems and organs. Chronic skin, liver, musculoskeletal, and reproductive system diseases, as well as immunological and lifestyle issues, have been proven to be extremely effective and acceptable treatments.

Unani Medicine industry in India is expected to register a CAGR of 8.6% during the forecast period. India is the world's 2nd largest exporter of Unani Medicine in the world and is frequently encouraging its export interests. The export of medicinal plants from India has taken an upward trend.

As the demand for various Unani products to increase immunity grows, the price of these goods would rise. Due to growing knowledge of the effectiveness and efficacy of traditional systems of medicine, as well as increased government activities to promote these systems and rising R&D, the market for Unani Medicines in India is currently undergoing a spike in demand. People are also using alternative medicine more frequently for chronic illnesses including skin, joint pain, and respiratory problems, which is driving up demand. It is also being emphasised for serious health conditions such as hypertension, heart disease, and even diabetes.

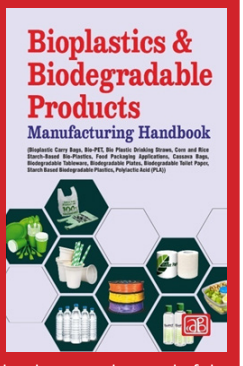
The book covers a wide range of topics connected to Unani Medicines, as well as their manufacturing processes. It also includes contact information of machinery suppliers, as well as images of equipment and plant layout.

A thorough guide on Unani Medicines manufacture and entrepreneurship. This book is a one-stop shop for everything you need to know about the Unani Medicines, which is ripe with opportunity for producers, merchants, and entrepreneurs. This is the only book that covers the process of making commercial Unani Medicines. From concept through equipment procurement, it is a veritable feast of how-to information.

Bioplastics & Biodegradable Products Manufacturing Handbook

(Bioplastic Carry Bags, Bio-PET, Bioplastic Drinking Straws, Corn and Rice Starch-Based Bioplastics, Food Packaging Applications, Cassava Bags, Biodegradable Tableware, Biodegradable Plates, Biodegradable Toilet Paper, Starch Based Biodegradable Plastics, Polylactic Acid (PLA))

₹1575/- $150-



Bioplastic is simply plastic that is created from a plant or other biological source rather than petroleum. It can be created by extracting sugar from plants like corn and sugarcane and converting it into polylactic acids (PLAs), or it can be made from microorganism-engineered polyhydroxyalkanoates (PHAs). Bioplastics are plastics made from renewable biomass sources such vegetable fats and oils, corn starch, straw, woodchips, sawdust, and recovered food waste, among others. Common plastics, such as fossil-fuel plastics (also known as petro-based polymers), on the other hand, are made from petroleum or natural gas.

Biodegradable Products Manufacturing (Bio-Products) are all types of natural and artificial products that can be easily decomposed without causing any damage to the environment. The significant examples of Biodegradable Products are Biodegradable Plastic, Biodegradable Airline Meals, Bio-degradable Toilet Paper, Biodegradable Cups etc. It has become the need of the hour to use these products as most of the goods like Plastics take many years to decompose in nature and this affects the environment adversely with time.

The worldwide bioplastics market is predicted to increase at a CAGR of 17.1 percent over the next five years. The packaging industry's rising product demand will propel the market even higher.

The book covers a wide range of topics connected to bioplastics and biodegradable products, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipment and plant layout.

A comprehensive reference to manufacturing and entrepreneurship in the bioplastics and biodegradable products business. This book is a one-stop shop for everything you need to know about the bioplastics and biodegradable products manufacturing industry, which is ripe with potential for manufacturers, merchants, and entrepreneurs. This is the only comprehensive guide to commercial bioplastics and biodegradable products manufacture. It provides a feast of how-to knowledge, from concept through equipment purchase.

Investment Opportunities in Healthcare Sector-
Medical College with Hospital

A medical college is meant to impart education of medical field to students to qualify them as doctors in different specialized disciplines so as to treat patients suffering from various ailments. Doctors with their dedicated spirit serve the nation at large by providing medication and treatment for eradication of diseases, which exchange health and add suffering to humanity.

PROJECT COST ESTIMATE
Capacity

Plant & Machinery	:	₹ 14.55 Cr
Cost of Project	:	₹ 73.05 Cr
Rate of Return	:	31%
Break Even Point	:	49%

Medical College means an institution, whether known as such or by any other name, which provides for a programme, beyond 12 years of schooling, for obtaining recognized MBBS qualification from a university and which, in accordance with the rules and regulations of such university, is recognized as competent to provide for such programmes of study and present students undergoing such programmes of study for the examination for the award of recognized MBBS/PG Degree/Diploma qualifications.

Indian healthcare sector, one of the fastest growing industry, is expected to advance at a CAGR of 22.87 per cent during 2015–2021 to reach USD280 billion. There is immense scope for enhancing healthcare services penetration in India, this presents ample opportunity for development of the healthcare industry.

Start a Production unit of
Sodium Hydrosulphite

Sodium hydrosulfite, also known as sodium dithionite or sodium hydrosulfide, is a chemical compound with the formula $NaHSO_2$. The compound consists of sodium ions bound to two sulfur dioxide molecules and can be thought of as the sodium salt of hydrosulfuric acid. It is used as an oxygen scavenger in chemical processes, and in the purification of drinking water and wastewater.

PROJECT COST ESTIMATE
Capacity

Plant Capacity	:	60.0 MT Per Day
Plant & Machinery	:	₹ 280 Lakhs
Cost of Project	:	₹ 934 Lakhs
Rate of Return	:	29%
Break Even Point	:	58%

The use of sodium hydrosulfite is also widely used for food additive such as beer, salt, egg powder and so on; for anhydrous sodium sulfate manufacture of leather ingredients; in water treatment agent.

Sodium Hydrosulfite Market Size will likely grow by a CAGR of about 4% up to 2024. The rising paper products demand in Asia Pacific will drive the global sodium hydrosulfite market growth till 2024 owing to its extensive application as a reductive bleaching agent for pulp in the paper manufacturing process. Increasing consumer confidence, disposable income, and shoppers' eagerness to keep up with the latest fashion trends are just a few of the major factors driving the textile market's growth.

Manufacturing of
Granulated Fertilizers

Granular or dry fertilizer is a type of fertilizer which comes in a dry pelleted form, as opposed to spikes, a liquid, or powder. Most garden stores carry several different types of granular fertilizer, along with an array of formulations which are designed to address specific soil conditions.

PROJECT COST ESTIMATE
Capacity

Plant Capacity	:	₹ 200 MT Per Day
Plant & Machinery	:	₹ 436 Lakhs
Cost of Project	:	1954 Lakhs
Rate of Return	:	29%
Break Even Point	:	50%

NPK fertilizers are three-component fertilizers providing nitrogen, phosphorus, and potassium. NPK rating is a rating system describing the amount of nitrogen, phosphorus, and potassium in a fertilizer. NPK ratings consist of three numbers separated by dashes (e.g., 10-10-10 or 16-4-8) describing the chemical content of fertilizers. The first number represents the percentage of nitrogen in the product; the second number, P_2O_5 the third, K_2O.

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. As a result, the demand of fertilizers has witnessed double digit growth rates over the past several years. The Indian fertilizer market reached a value of INR 887 Billion in 2020. Looking forward, the market expect to grow at a CAGR of 5.5% during 2021-2026.

Bio-Organic Fertiliser
from Tea Waste

Organically-grown plants generally taste better and are healthier for you, but organic fertilizers do more than that—they also help preserve the environment and lower your monthly energy bills by reducing the need for additional landscaping lighting.

One of the most interesting types of organic fertilizer is created from tea waste. Tea waste or CTC pulps are obtained after the processing of tea leaves. The CTC process (crush, tear and curl) can be applied to green, black, yellow and white teas which creates different types of residues that have different properties, depending on the variety of tea leaves and their natural characteristics.

The biological organic fertilizer market is projected to grow at a CAGR of 13.3% during the year (2021-2026). The COVID-19 pandemic has impacted the biological organic fertilizer market, resulting in the slow growth of the market during the period. With the effective policies from the government and implementation of suitable practices can help companies to gain profits post the immediate effects of the pandemic.

PROJECT COST ESTIMATE
Capacity

Capacity	:	5 MT Per Day
Plant & Machinery	:	₹ 60 Lakhs
Cost of Project	:	₹ 381 Lakhs
Rate of Return	:	26%
Break Even Point	:	44%

The Indian fertilizer market was worth INR 4,675 Billion in 2017. Looking forward, the market is projected to reach INR 9,987 Billion by 2023, at a CAGR of around 13% during 2018-2023.

Profitable Business of
Prestressed Concrete Sleepers

Concrete sleepers are one of the most important applications of a railway track system. The impact load characteristics and ultimate load carrying capacity of a prestressed sleeper, but the fatigue life of prestressed concrete sleepers is limited. The railway sleeper is a vital railway component that lies between the rail and the ballast. The sleepers can be manufactured using timber, concrete, steel or other engineering materials and concrete is commonly used around the world. Prestressing is the process of applying a load to a structure deforming is it so that it will with stand a work load more effectively or so that it will deflect less. Concrete sleepers, beside their advantageous like more life-time and strength, have some disadvantageous too. Such these disadvantageous are their heavy weight which required specialized machinery during laying and installation and also their production casts, while their initial cost is almost double that of hardwood timber sleepers.

PROJECT COST ESTIMATE
Capacity

Capacity	:	1,000 Pcs Per Day
Plant & Machinery	:	₹ 26.59 Cr
Cost of Project	:	₹ 38.12 Cr
Rate of Return	:	27%
Break Even Point	:	40%

The market size is projected to grow from USD 104.03 Billion in 2017 to USD 138.96 Billion by 2022, at an estimated CAGR of 5.96%. Civil Engineering infrastructure is the largest static infrastructure of Indian Railways comprising of track, bridges, land, etc. Management of this huge infrastructure has to be done in accordance with the organization's vision.

Production Business of
Sterile Water for Injection

Sterile Water for Injection, USP (SWFI) contains water that has been purified by reverse osmosis and deionized by the use of advanced technologies so that it meets or exceeds the United States Pharmacopeia (USP) standards for sterility, physical qualities, and purity. SWFI has an ionic content of < 10 mg/L (TDS). It is commonly used in clinical applications where water is used as a vehicle or diluent for other medications.

Sterile products are most frequently solution or suspensions, but may even be solid pellets for tissue implementation. The manufacturing of parenterals has become a highly specialized area in pharmaceutical processing.

India's biotechnology industry comprising biopharmaceuticals, bio-services, bio-agriculture, bio-industry, and bioinformatics is expected grow at an average growth rate of around 30 per cent a y-o-y to reach US$ 100 billion by 2025.

Indian pharmaceutical sector is expected to grow to US$ 100 billion, while medical device market is expected to grow US$ 25 billion by 2025. Pharmaceuticals export from India stood at US$ 20.70 billion in FY20. Pharmaceutical export include bulk drugs, intermediates, drug formulations, biologicals, Ayush and herbal products and surgical.

PROJECT COST ESTIMATE

Capacity:

Ampoules 5 ml Size	:	200,000 Nos. Per Day
Ampoules 10 ml Size	:	150,000 Nos. Per Day
Ampoules 20 ml Size	:	150,000 Nos. Per Day
Plant & Machinery	:	₹ 19.33 Cr
Cost of Project	:	₹ 30.40 Cr
Rate of Return	:	27%
Break Even Point	:	39%

Startup Manufacturing Business Ideas of
Epoxy Resin (Liquid)

Epoxy resin refers to a type of reactive pre-polymer and polymer containing epoxide groups. These resins react either with themselves in the presence of catalysts, or with many co-reactants like amines, phenols, thiols, etc.

Epoxy resin is superior to other types of resins because it has low shrink during cure, and excellent moisture and chemical resistance. It is impact resistant and it has good electrical and insulating properties, and a long shelf life. The most common epoxy resins are based on reacting Epichlorohydrin (ECH) with bisphenol A. Bisphenol A-based resins are the most widely commercialised resins.

The global Epoxy Resin market size is anticipated to grow at a CAGR of 5.85%. Epoxy resins have a property of containing one more than one epoxy group per molecule and are thermosetting resins that make use of suitable cross-linking agents for higher reactivity. Epoxy resins are respected by being the largest raw material used for different chemical formulations.

Highly conducive properties belonging to epoxy resins including high thermal stability, mechanical strength, moisture resistivity, adhesion, and heat resistance make epoxy resins as the resin of choice for several end-user applications such as laminates and insulators.

PROJECT COST ESTIMATE
Capacity

Plant Capacity	:	20 MT Per Day
Plant & Machinery	:	₹ 689 Lakhs
Cost of Project	:	₹ 1956 Lakhs
Rate of Return	:	30%
Break Even Point	:	80%

Solar Panel
Manufacturing (both type of the PV Cells: Polycrystalline and Monocrystalline

A Solar panel consists of a number of solar modules, which are connected in series and parallel configuration to provide specific voltage and current to charge a battery. Photovoltaic panels constitute the solar array of a photovoltaic system that generates and supplies solar electricity in commercial and residential applications.

PROJECT COST ESTIMATE

Capacity :

Solar Panel 140 MW

Mono Crystalline Solar PV Module Capacity: 250 Watt	:	466.8 Nos. Per Day
Mono Crystalline Solar PV Module Capacity: 320 Watt	:	364.6 Nos. Per Day
Poly Crystalline Solar PV Module Capacity: 250 Watt	:	466.8 Nos. Per Day
Poly Crystalline Solar PV Module Capacity: 320 Watt	:	364.6 Nos. Per Day
Plant & Machinery	:	₹ 36.35 Cr
Cost of Project	:	₹ 63.46 Cr
Rate of Return	:	30%
Break Even Point	:	44%

Each module is rated by its DC output power under standard test conditions, and typically ranges from 100 to 365 watts A single solar module can produce only a limited amount of power; most installations contain multiple modules. A photovoltaic system typically includes a panel or an array of solar modules, a solar inverter, and sometimes a battery and/or solar tracker and interconnection wiring.

The global solar power market is expected to grow from $184.03 billion in 2021 to $293.18 billion in 2028 at a CAGR of 6.9% in forecast period 2021-2028. The global solar panel market accelerates along with the unabated shift towards renewable energy. China, the leader in solar panel exports, will enjoy robust foreign demand while the domestic purchases may slow due to tariff subsidies cut. The deployment of distributed solar photovoltaic systems in homes as well as for commercial and industrial buildings appears as a budding market segment worldwide.

Entrepreneurial Opportunities in
Highway Guard Crash Barrier, Traffic barriers Highway Safety Guardrail
(Roll Forming with Metal Beam and Galvanizing Plant)

Metal Beam, Highway Guard Crash Barrier Traffic barriers also known as guardrails or guard rails and in Britain as crash barriers keep vehicles within their roadway and prevent them from colliding with dangerous obstacles such as boulders, sign supports, trees, bridge abutments, buildings, walls, and large storm drains, or from traversing steep (non-recoverable) slopes or entering deep water.

To make sure they are safe and effective, traffic barriers undergo extensive simulated and full scale crash testing before they are approved for general use. While crash testing cannot replicate every potential manner of impact, testing programs are designed to determine the performance limits of traffic barriers and provide an adequate level of protection to road users.

Highway construction in India increased at 21.44 per cent CAGR between FY16-FY19. In FY19, 10,855 km of highways were constructed, and the Government had set a target for constructing 12,000 km of national highways in FY20. In March 2020, NHAI (National Highways Authority of India) accomplished the highest ever highway construction of 3,979 kms.

PROJECT COST ESTIMATE

Capacity :

Metal Beam Highway Crash Barrier	:	200 MT Per Day
MS Sheet Scrap	:	40 MT Per Day
Plant & Machinery	:	₹ 905 Lakhs
Cost of Project	:	₹ 2973 Lakhs
Rate of Return	:	30%
Break Even Point	:	46%

Profitable Business of
Calcium Sennoside
from Senna Leaves

Calcium Sennoside are the most important ingredients in some of the multi-vitamin products, health care products and food additives, which play an important role in the human body, such as bone building, tooth remineralization and muscle contraction. It can also be used in making of various functional foods such as calcium fortified milk powder, calcium fortified beverage powder and calcium fortified bread.

The Associated Chambers of Commerce and Industry of India (ASSOCHAM) has projected that the market size of herbal industry which is currently estimated at Rs.7,500 crores will be double to levels at Rs. 15,000 crore by 2022 as this industry would be growing at a compounded annual growth rate of over 20% henceforth.

PROJECT COST ESTIMATE
Capacity

Plant Capacity	:	400 Kgs Per Day
Plant & Machinery	:	₹ 291 Lakhs
Cost of Project	:	₹ 607 Lakhs
Rate of Return	:	28%
Break Even Point	:	59%

Interestingly both raw materials (herbs) and herbal products have ready market globally. Releasing the study, ASSOCHAM Secretary General, D.S. Rawat said that ideally, the niche market that India can focus on include Ayurvedic Medicines and Dietary Supplements (including health drinks), extracts, Oils and other derivatives, skincare and beauty aids.

Most Lucrative Startup Business of
Activated Alumina
(Spherical Balls Manufacturing

Activated alumina is a form of aluminum oxide (Al_2O_3) with a myriad of industrial uses. Activated alumina exhibits a number of characteristics that make it ideal in many industrial process settings. This includes a high crush strength, resistance to thermal shock, resistance to chemical attack, and more. The characteristic that has pushed activated alumina to the forefront of many applications is its capability as an adsorbent, courtesy of its high porosity and surface area.

Activated alumina is manufactured by dehydroxylating aluminium hydroxide in a way that produces a highly porous substance. The chemical composition can be represented by $Al_2O_3 \cdot OH_2$.The term "activated aluminas" refers to the "activation" those results from calcination. The activated alumina market size was 146.2 million in 2020 and will grow at a CAGR of 8.2% from 2021 to 2027. The proliferating oil & gas production coupled with increasing oil & gas exploration activities across the globe will augment the product demand.

PROJECT COST ESTIMATE
Capacity

Capacity	:	6 MT Per Day
Plant & Machinery	:	₹ 97 lakhs
Cost of Project	:	₹ 230 Lakhs
Rate of Return	:	7%
Break Even Point	:	78%

The market is majorly driven by factors, such as rising demand for clean water, shrinking water reserves, and implementation of new water treatment facilities. Activated alumina is formed by dihydroxylation of aluminum hydroxide to produce highly porous material. It is used in various applications including catalyst, desiccant, fluoride adsorbent, bioceramics, and others.

Production Business of
Zinc Oxide
from Zinc Dross
(White Seal)

Zinc dross is obtained from the recovery of zinc. The zinc types may be recovered from galvanized sheets, batteries, car components, galvanizing processes, etc. Zinc ashes are formed on the surface of molten zinc baths, and whilst primarily zinc oxide, particles of finely divided zinc will also adhere to the oxide. The various types of zinc are treated by processes to produce pure zinc metal.

Zinc oxide is an inorganic compound with the formula ZnO. ZnO is a white powder that is insoluble in water, and it is widely used as an additive in numerous materials and products including rubbers, plastics, ceramics, glass, cement, lubricants, paints, ointments, adhesives, sealants, pigments, foods, batteries, ferrites, fire retardants, and first-aid tapes.

PROJECT COST ESTIMATE
Capacity

Capacity	:	12 MT Per Day
Plant & Machinery	:	₹ 181 Lakhs
Cost of Project	:	₹ 595 Lakhs
Rate of Return	:	31%
Break Even Point	:	59%

Growing effect of such bacteria on the food safety, particularly ready-to-eat segment, has fuelled product research in the zinc oxide market. Growing prospect of zinc oxide in antimicrobial packaging is also likely to expand the potential biomedical applications. The global zinc oxide market was valued at over 1,400 kilotons in 2020, and it is expected to grow at a CAGR of over 4% in volume over the forecast period (2021-2026).

Water Park

The global water parks market size was valued at USD 45.2 billion in 2017. It is likely to expand at a CAGR of 5.8% from 2018 to 2025. Innovative rides, accommodation facilities, and merchandise in water parks are gaining popularity among visitors of all age groups. As a result, there is a rise in the number of adults and children visiting water parks, thus expanding the size of the target audience.Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

Capacity :		
Water Park Visitors	:	1,000 Visitors / Day
Room Rent from Resort	:	25 Visitors / Day
Restaurant–Vegetarian Visitors	:	300 Visitors / Day
Restaurant–Non-Veg. Visitors	:	200 Visitors / Day
Restaurant–Beverages, Tea & Coffee Visitors	:	475 Visitors / Day
Plant & Machinery	:	₹ 1086 Lakhs
Cost of Project	:	₹ 3208 Lakhs
Rate of Return	:	33%
Break Even Point	:	38%

Emerging Business of
Lithium Ion Battery
(LiFePO4)

A lithium iron phosphate (LFP) battery is a type of lithium-ion battery that is capable of charging and discharging at high speeds compared to other types of batteries. It is a rechargeable battery consisting of $LiFePO_4$ as its cathode material; hence the name.

PROJECT COST ESTIMATE

Plant Capacity:		
Lithium Ion (LiFePO4) Battery Back of Power 4.8 KWH (No. of Cells 800) for Three Wheeler	:	26 Nos. Per Day
Lithium Ion (LiFePO4) Battery Back of Power 18 KWH (No. of Cells 3000) for Four Wheeler	:	24 Nos. Per Day
Plant & Machinery	:	₹ 3 Cr.
Cost of Project	:	₹ 10.28 Cr
Rate of Return	:	32%
Break Even Point	:	57%

Lithium iron phosphate (LFP) batteries are also known as lithium ferrophosphate batteries. The major distinction that lithium iron phosphate batteries have from other li-ion batteries is that LFP is capable of delivering a constant voltage and also has a comparatively higher charge cycle, in the range of 2000-3000. LFP batteries are environmentally safe and structurally stable. They have a lower energy density and low discharge rate. They do not heat up easily and are relatively cooler than other batteries.

The lithium iron phosphate batteries market is projected to reach USD 10.6 billion by 2024 from an estimated USD 8.3 billion in 2019, at a CAGR of 5.0% during the period. This growth is attributed to the increasing focus on electric and hybrid electric vehicles and high demand for energy storage applications.

Start Business of
A-2 Cow Milk Processing
(Milk, Butter, Ghee & Paneer)

Milk is the most important source of protein and is consumed by people all over the world. Milk is readily available as a raw product from a range of dairy farms, and it is treated to boost the variety of nutrients. Heat treatments, pasteurisation, homogenization, and other milk processing activities are performed or handled by milk processing factories, which comprise a variety of milk processing equipment.

Cows produce A1 milk and A2 milk, which are two different types of milk. A2, commonly known as desi cow milk, enhances overall health and nutritional value by removing digestive discomfort. According to studies, desi cow milk is healthier than A1 milk.

A2 milk is a natural, antibiotic-free alternative to industrial milk, which contains stress hormones and antibiotics. Similarly, desi cow milk is wholesome and chemical-free.

Cow milk derived from Desi cows with a hump on their back is known as A2 milk. Furthermore, desi cow milk has A2 beta protein, which makes it healthier and more nutritious than conventional cow milk, which contains A1 protein.

PROJECT COST ESTIMATE

Capacity :

A-2 Milk (1 Ltr Tetra Pack)	: 2,250 Kgs Per Day
Butter (100 & 500 gms Pack)	: 46 Kgs Per Day
Paneer (4 Pcs or 1 Kgs Pack)	: 143 Kgs Per Day
Ghee (1 Kgs Tetra Pack)	: 40 Kgs Per Day
Plant & Machinery	: ₹ 19 Lakhs
Cost of Project	: ₹ 484 Lakhs
Rate of Return	: 25%
Break Even Point	: 58%

The global a2 milk market was worth $1,129.7 million in 2019 and is expected to grow to $3,699.2 million by 2027, with a CAGR of 15.8% from 2021 to 2027. The liquid a2 milk segment held the largest proportion of the market in 2019. A2 milk is a type of cow's milk that includes mostly a2 beta casein protein and is free of a1 beta casein protein. It comes from cows of specific breeds like as Guernsey, Jersey, Holstein, Brown Swiss, and others.

The key factor of driving market expansion is increasing consumer health awareness, which leads to greater consumption of A2 milk, as well as growing the range of A2 milk products, which will drive demand for the global A2 milk market.

Aluminium Cans for Beverages

The aluminium beverage can is now the popular choice for carbonated and still soft drinks, mineral waters, beers and lagers. It competes successfully against drinks containers of glass, plastic and steel, and is the only drinks container for which closed loop recycling applies; a used aluminium drinks can is recycled back into aluminium can sheet for the manufacture of another aluminium drinks can.

The good thermal properties of aluminium mean that the drinks can is quickly chilled. It has good rigidity and strength without the grave disadvantages of a glass bottle, of being fragile and dangerous when broken and much heavier than analuminium can. It is lighter than steel and even a steel beverage can relies on aluminium for the top of the can since the better control on gauge and properties of aluminium mean that the easy open end of the can only be made in aluminium.

The beverage can markets in sub-Saharan Africa and India have been slow to develop. Can demand is expected to increase in the coming years in line with rising incomes, better retail infrastructure and changing consumer tastes.In 2019, the global aluminium cans market attained a value of USD 957 billion. In the forecast period of 2020-2025, the industry is expected to witness a CAGR of 3.25% to reach a value of USD 1159.5 billion by 2025.

PROJECT COST ESTIMATE

Capacity :

Aluminium Cans for Beverage Size 355 ml	: 83,333 Pcs. Per Day
Aluminium Cans for Beverage Size 473 ml	: 83,334 Pcs. Per Day
Plant & Machinery	: ₹ 39.33 Cr
Cost of Project	: ₹ 56.55 Cr

Start an
E-Waste Recycling Plant
(E-waste Recycling Business)

Electronic wastes, "e-waste", "e-scrap", or "Waste Electrical and Electronic Equipment" ("WEEE") is a description of surplus, obsolete, broken or discarded electrical or electronic devices. Technically, electronic "waste" is the component which is dumped or disposed or discarded rather than recycled, including residue from reuse and recycling operations. Because loads of surplus electronics are frequently coming led (good, recyclable, and non-recyclable), several public policy advocates apply the term "e-waste" broadly to all surplus electronics.

Global E-Waste Management Market is expected to garner $49.4 billion by 2020, registering a CAGR of 23.5% during the forecast period 2014–2020. It is one of the fastest growing waste streams in emerging as well as developed regions. The reduced life spans of electrical, electronic and consumer electronic devices are generating large E-Waste, which is growing rapidly every year.

The growth of E-Waste market is supplemented by the growing need for upgrading to the latest technologies. A desire towards the adoption of new technologically advanced devices leads to generation of millions of tons of E-Waste across various regions.

PROJECT COST ESTIMATE

Plant Capacity:

Plastic	: 1.60 MT Per Day
Ferrous Material	: 1.00 MT Per Day
Aluminium	: 0.70 MT Per Day
Glass	: 1.00 MT Per Day
Copper	: 0.70 MT Per Day
Plant & Machinery	: ₹ 86 Lakhs
Cost of Project	: ₹ 314 Lakhs
Rate of Return	: 27%
Break Even Point	: 60%

Steel Containers *(Cargo Containers)*

Containerized shipping has changed the way that goods and materials are transported, but it can also take a while to learn how it all works. Cargo containers are the most efficient form of transportation when it comes to moving bulk loads over long distances. These sturdy metal boxes may look like something out of Star Wars, but they're actually an economical and environment-friendly way to ship goods across the globe, especially when compared to transporting by road or air freight services.

The cargo container industry produces a lot of intermodal containers each and every year. They are used to transport goods all over the world. About 180 million container loads crisscross the oceans each year in about 5000 container ships. International shipping of containerized commodities is indispensable for global trading firms to thrive in the increasingly competitive economic environment.

The global Shipping Containers Market was accounted for US$ 10,350.1 Mn in terms of value and 306,324 Thousand Units in 2019 and is expected to grow at CAGR of 5.9% for the period 2020-2027. Increasing speed, reliability, and safety of containerization have compelled companies to opt for containers to ship their goods.

PROJECT COST ESTIMATE

Capacity

Cargo Containers (Size 20 Feet)	: 34 Nos Per Day
Plant & Machinery	: ₹ 3.21 Cr
Cost of Project	: ₹ 18.13 Cr
Rate of Return	: 28%
Break Even Point	: 52%

Start Manufacturing of Micronutrient Fortified Energy Dense Food

Micronutrient-fortified food helps to prevent chronic diseases like obesity, diabetes, and heart disease by increasing the intake of micronutrients (vitamins and minerals) that may otherwise be lacking in the diet. There are many micronutrients that play a role in maintaining healthy body weight and blood sugar levels, such as vitamins C and B6, folic acid, zinc, and magnesium. For health reasons, we need to take in certain essential vitamins and minerals every day and if we fail to do so, it can lead to various health issues later on.

Deficiencies in one or more micronutrients such as iron, zinc, and vitamin. A are widespread in low- and middle-income countries and compromise the physical and cognitive capacity of millions of people. Food fortification is a cost-effective strategy with demonstrated health, economic and social benefits.

PROJECT COST ESTIMATE
Capacity

Micronutients Fortified Energy Dense Food (Rice)	: 1,600 Kgs Per Day
Plant & Machinery	: ₹ 23 Lakhs
Cost of Project	: ₹ 56 Lakhs
Rate of Return	: 27%
Break Even Point	: 66%

Fortified Food Market size is estimated at $172.4 Million in 2020, projected to grow at a CAGR of 6.1% during the forecast period 2021-2026. Fortified Foods are foods that possess nutrients supplemented to them that are not organically present in them. These foods are aimed at enhancing nutrition and supplement health advantages. For example, milk is frequently fortified with vitamin D and calcium could be supplemented to fruit juice extracts.

Manufacturing of Camphor Powder (Technical Grade)

Camphor (Cinnamomumcamphora) is a white, crystalline substance with a strong odor and pungent taste, derived from the wood of camphor laurel (Cinnamomumcamphora) and other related trees of laurel family. Camphor tree is native to China, India, Mongolia, Japan and Taiwan and a variety of this fragrant evergreen tree is grown in Southern United States Especially in Florida.

Camphor or Camphor Powder (Technical grade) or Oil of camphor, CAS-No. 458-28-4, is an organic compound that exists in the form of white crystals or crystalline powder with a characteristic odor of mint oil and slight numbing taste. The main component in this kind of product is found to be C10H16O and the molecular weight of Camphor Powder (Technical grade) (CAS-No. 458-28-4) is 164.23g/mol.

PROJECT COST ESTIMATE
Capacity

Capacity	: 600 Kgs Per day
Plant & Machinery	: ₹ 96 Lakhs
Cost of Project	: ₹ 160 Lakhs
Rate of Return	: 29%
Break Even Point	: 67%

Due to good chemical properties it has wide range of application in various end user industries such as pharmaceuticals, food, agriculture and chemical among several others. It is also used for making ointments with vapor for treating cough and chest congestion. Rising demand of camphor for the ointments is anticipated to drive the growth for the market. The camphor market was valued at US$ 0.1071 Bn in 2017, and is expected to reach US$ 0.1636 Bn by 2025, expanding at a CAGR of 7.6% from 2017–2025.

Polyester Texturised Yarn from Used Pet Bottle Manufacturing Business

Polyester Texturised Yarn are sometimes referred to as polyester filament, polyester filaments or polyester staple fiber which have been tightly woven into yarn and then texturized with cones of finer filament. Polyester Texturised Yarn can be divided into two sub categories: High Tenacity (HT) and High Twist (HT). HTY has the highest tenacity and the highest twist, while HTY and HTY have a good balance between tenacity and twist. Polyester texturised yarn (or PT yarn) is a special type of fabric with the look and feel of cotton.

Poly-Ethylene Terephthalate (PET) is one of the most widely used plastics today. PET bottles are ubiquitous in our day-to-day lives–one has to just look around to spot a PET bottle containing mineral water or soft drink or used for other applications. PET bottles, post use, still carry a lot of value, and recycled PET (r-PET) can be used in a wide variety of applications. This makes post-consumer PET bottles a very sought after item by waste collectors.

Polyester Yarn market size is expected to gain market growth in the forecast period of 2021 to 2025, with a CAGR of 7.4% in the forecast period of 2021 to 2025 and will expected to reach USD 110580 million by 2025, from USD 83210 million

PROJECT COST ESTIMATE
Capacity

Capacity	: 50 MT Per Day
Plant & Machinery	: ₹ 19.08 Cr
Cost of Project	: ₹ 38.44 Cr
Rate of Return	: 28%
Break Even Point	: 54%

Polyester is the most desirable and demanded fiber in the textiles industry is owing to its improved physical properties, lower price, versatility, and recyclability, which provides a unique set of benefits incomparable by any other natural or synthetic fibers.

Active Pharma Ingredients (API) (Cephalexin, Ampicillin Trihydrate, Ibuprofen and Paracetamol)

The Active Pharmaceutical Ingredient (API) is the part of any drug that produces the intended effects. Some drugs, such as combination therapies, have multiple active ingredients to treat different symptoms or act in different ways.

The global demand of APIs include ageing population, rising expenditures on healthcare, increasing prevalence of lifestyle diseases, etc. Looking forward, the market value is projected to reach US$ 258.8 Billion by 2025, exhibiting a CAGR of 5.6% during 2020-2025. The API market is competitive in nature and is becoming increasingly competitive. Consequently, manufacturers are required to enhance products in order to gain advantage over previously marketed products.

India is the seventh largest country in the world and has the second highest population. It has a parliamentary democratic form of government and has abundant natural resources and sufficient oil reserves. The country has a huge skilled, English-speaking, and inexpensive labor force. Its young population and current economic policies have made it one of the largest recipients of FDI in the world. Asia Pacific is expected to be the fastest-growing market over the forecast period. Owing to the availability of affordable labor, major companies in the market are setting up API manufacturing plants in developing countries such as China and India.

PROJECT COST ESTIMATE

Capacity:	
Paracetamol	: 500 Kgs / Day
Cephalexin	: 500 Kgs / Day
Ampicillin Trihydrate	: 500 Kgs / Day
Ibuprofen	: 500 Kgs / Day
Plant & Machinery	: ₹ 347 Lakhs
Cost of Project	: ₹ 1656 Lakhs
Rate of Return	: 32%
Break Even Point	: 52%

India's reliance on pharma ingredient imports has risen over the past few decades due to the higher cost of domestic production, with the price gap reaching as much as 20%-30%, particularly for energy-intensive fermentation-based ingredients used in anti-infectives. Import dependence is more than 90% for some life-saving drugs, including penicillin and ciprofloxacin. As a whole any entrepreneur can venture in this project without risk and earn profit.

Biodegradable Plastic Bags
from Corn & Cassava Starch

Corn starch has 25% amylose and 75% amylopectin. The amylose molecules loose lose water increase biodegradation characteristic and amylopectin molecule is responsible for plasticizer properties. Their granule size ranges between 5 to 20 microns. I.e. good absorption capacity, rapid gel formation & good strength. Starch is used to produce such diverse products as food, paper, textiles, adhesives, beverages, confectionery, packaging, pharmaceuticals, and building materials. Cassava starch has many remarkable characteristics, including high paste viscosity, high paste clarity, and high freeze-thaw stability, which are advantageous to many industries.

Cassava starch could be used for making various types of packaging products. As a major source of starch in tropical and subtropical regions, cassava is a promising raw material for the development of biodegradable plastics in these areas.

The global biodegradable plastic packaging market was valued at USD 4.65 billion in 2019, and is expected to reach a market value of USD 12.06 billion by 2025, registering a CAGR of 17.04% during the forecast period of 2020-2025. Growing environmental concerns regarding plastic usage that consists of toxic pollutants which are harming plants, animals, and people are driving the use of biodegradable plastic. Stringent regulations by various government and federal agencies with an objective to reduce plastic waste and promote biodegradable plastics usage in packaging is boosting the demand of this market. As a whole any entrepreneur can venture in this project without risk and earn profit.

PROJECT COST ESTIMATE

Capacity :

Biodegradable Plastic Bags from Corn Starch (Per Bag 25 gms Size)	: 6 MT / Day
Biodegradable Plastic Bags from Cassava Starch (Per Bag 25 gms Size)	: 6 MT / Day
Plant & Machinery	: ₹ 1053 Lakhs
Cost of Project	: ₹ 1768 Lakhs
Rate of Return	: 27%
Break Even Point	: 51%

Profitable Industry of ADHESIVE
(Fevicol Type–D2, D3, D4)

An adhesive is a material that is used to hold two surfaces together by wetting them, adhering to them, and developing strength after application, and remaining stable. Prior to applying the glue, it is critical to prepare the surface. Polymeric materials, both natural and manmade, are the most common source ingredients for adhesives. The way adhesives react chemically after they've been applied to the surfaces to be connected is a good approach to identify them. There are numerous adhesives available, and one that is suited for the materials being connected must be selected.

Applications:

a) Adhesives, such as white craft glue, are utilised in lightweight materials such as cardboard, paper, fabric, and children's crafts. Water is usually their carrier, making them easier to clean and less dangerous. Before any strength can be detected, these types of glue must cure.

b) In the fabric industry, adhesive is used. Fabric adhesives, such as liquid white glues like polyvinyl acetate, can be used to achieve this.

c) Acrylate adhesives are commonly used in the ceramic and leather industries. These glues tend to join quickly and provide a strong connection with a clear finish.

PROJECT COST ESTIMATE
Capacity

Fevicol Type Adhesive (D2, D3 & D4)	: 10 MT Per Day
Plant & Machinery	: ₹ 78 Lakhs
Cost of Project	: ₹ 247 Lakhs
Rate of Return	: 27%
Break Even Point	: 53%

d) Adhesive is used in the paint industry to improve paint and coating adhesion.

Wood Type Adhesives are a cost-effective and environmentally benign alternative to solvent-based adhesives. The absence of volatile organic chemicals is a major advantage of water-borne adhesives. Acrylics have a variety of features, including durability, colour preservation, quick drying, environmental friendliness, impact resistance, and so on.

Start Production of Paracetamol
(BP/IP/USP Grade)

India is the world's top supplier of generic pharmaceuticals. The Indian pharmaceutical industry supplies more than half of global demand for vaccines, 40% of generic demand in the United States, and 25% of all pharmaceuticals in the United Kingdom. Around 70% of India's need for bulk pharmaceuticals, drug intermediates, pharmaceutical formulations, chemicals, tablets, capsules, orals, and injectable is met by the pharmaceutical industry.

Paracetamol Powder's Applications: Fever, Discomfort relief, Osteoarthritis, Lower Back Pain, Headache Swiss, Toothache, Menstrual Period Pain, Cold/Flu Pain

During the forecast period, India's paracetamol market is expected to rise at a rapid pace. The extensive usage of paracetamol as a first-line treatment for pain and fever relief drives the paracetamol market in India. Additionally, the drug's broad use in COVID-19 patients to reduce various symptoms of cold, cough, and fever is predicted to drive market growth through FY2026. By 2025, the Indian pharmaceutical sector is estimated to be worth US$ 100 billion, while the medical device market would be worth US$ 25 billion. In FY20, India's pharmaceutical exports totaled US$ 16.3 billion.

PROJECT COST ESTIMATE

Capacity :

Paracetamol Powder (IP/BP Grade)	: 50 MT Per Day
Acetic Acid (31% Conc.) By Product	: 72 MT Per Day
Plant & Machinery	: ₹ 962 Lakhs
Cost of Project	: ₹ 2887 Lakhs
Rate of Return	: 32%
Break Even Point	: 52%

Lead Production
(Litharge, Refined Lead, Red Lead & Grey Lead)

Lead is a relatively soft metal with bluish-white lusture but on exposure to air, it becomes covered by a dull, gray layer of basic carbonate that adheres closely and protects it from further oxidation or corrosion. It is an important component of batteries, and about 75% of the world's lead production is consumed by the battery industry. Lead is also commonly used in glass and enamel.

India Lead Acid Battery Market is projected to grow at a CAGR of over 9% during 2018-24.India lead acid battery market is projected to reach $ 7.6 billion by 2023. Anticipated growth in the market can be attributed to booming demand for automobiles, in addition to increasing focus of the government towards boosting the penetration of electric vehicles in the country. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE

Capacity :

Litharge	:	960 MT/Annum
Refined Lead	:	1800 MT/Annum
Red Lead	:	440 MT/Annum
Grey Lead	:	525 MT/Annum
Plant & Machinery	:	₹ 82 Lakhs
Cost of Project	:	₹ 361 Lakhs
Rate of Return	:	31%
Break Even Point	:	54%

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The Complete Technology Book on Electroplating, Phosphating, Powder Coating and Metal Finishing (2nd Rev. Edn.)	1675/- 150
Handbook on Electroplating with Manufacture of Electrochemicals	1695/- 150

RUBBER PROCESSING AND COMPOUNDING

The Complete Book on Rubber Processing and Compounding Technology (with Machinery Details) (2nd Revised Edition)	1875/- 150
The Complete Book on Rubber Chemicals	1575/- 150

SURFACE COATING, PAINTS, VARNISHES & LACQUERS

The Complete Book on Resins (Alkyd, Amino, Phenolic, Polyurethane Epoxy, Silicone, Acrylic) Paints, Varnishes, Pigments & Additives (Surface Coating Products with Formulae) 3rd Rev. Edn.	1995/- 150
Paints, Pigments, Varnishes and Enamels Technology Handbook (With Process & Formulations) 2nd Rev. Edn.	1675/- 150
Modern Technology of Paints, Varnishes & Lacquers (2nd Edn.)	1075/- 125
Handbook on Paints and Enamels	1275/- 125
Surface Coating Technology Handbook	1475/- 125
Spirit Varnishes Technology Handbook (with Testing and Analysis)	1275/- 150
The Testing Manual of Paints, Varnishes and Resins	1875/- 150
Handbook on Paint Testing Methods	1575/- 150
Manufacture of Thinners & Solvents (Properties, Uses, Production, Formulation with Machinery Details) 2nd Edn. Rev.	1875/- 150

GUMS, ADHESIVES & SEALANTS, ROSIN & DERIVATIVES, RESINS AND OLEORESINS

Gums, Adhesives & Sealants Technology (with Formulae & their Applications) 2nd Rev. Edn.	1475/- 150
Adhesives Formulary Handbook	1275/- 125
Handbook on Speciality Gums, Adhesives, Oils, Rosin & Derivatives, Resins, Oleoresins, Katha, Chemicals with Other Natural Products	1275/- 125
The Complete Book on Adhesives, Glues & Resins Technology (with Process & Formulations) 2nd Rev. Edn.	1675/- 150
Phenolic Resins Technology Handbook (2nd Revised Edition)	1895/- 150
The Complete Technology Book on Industrial Adhesives	1675/- 150
The Complete Book on Gums and Stabilizers for Food Industry	1275/- 125
The Complete Book on Water Soluble Gums and Resins	1675/- 150
Handbook on Tall Oil Rosin Production, Processing and Utilization	1575/- 150

SYNTHETIC RESINS

Modern Technology of Synthetic Resins & Their Applications (2nd Revised Edition)	1575/- 150
Synthetic Resins Technology Handbook	1100/- 125
The Complete Technology Book on Synthetic Resins with Formulae & Processes	1150/- 125
Alkyd Resins Technology Handbook	1100/- 125
Epoxy Resins Technology Handbook (Manufacturing Process, Synthesis, Epoxy Resin Adhesives and Epoxy Coatings) 2nd Revised Edition	1895/- 150

PETROLEUM, GREASES, PETROCHEMICALS, LUBRICANTS

Modern Technology of Petroleum, Greases, Lubricants & Petrochemicals (Lubricating Oils, Cutting Oil, Additives, Refining, Bitumen, Waxes with Process and Formulations) 3rd Rev. Edn.	1995/- 150
The Complete Book On Distillation And Refining of Petroleum Products (Lubricants, Waxes And Petrochemicals)	975/- 100
Lubricating Oils, Greases and Petroleum Products Manufacturing Handbook	1475/- 150
Manufacturing of Petroleum Products (Petroleum Waxes, Greases and Solid Lubricants, Solid Fuels, Gaseous Fuels, Gasoline, Diesel Fuel Oils, Automotive, Diesel and Aviation Fuels, Lubricating Oils and Lubricating Greases)	1675/- 150
Petroleum & Petroleum Products Technology Handbook (Thermal Cracking of Pure Saturated Hydrocarbons, Petroleum Asphalts, Refinery Products, Blending and Compounding, Oil Refining and Residual Fuel Oils)	1875/- 150

WASTE MANAGEMENT, PRODUCTS FROM WASTE, MEDICAL, MUNICIPAL WASTE, E-WASTE, BIOMASS, MEDICAL & SURGICAL DISPOSABLE PRODUCTS

Products from Waste (Industrial & Agro Waste) 2nd Edition	975/- 100
Modern Technology Of Waste Management: Pollution Control, Recycling, Treatment & Utilization	975/- 100
Handbook on Recycling & Disposal of –Hospital Waste Municipal, –Solid Waste, –Biomedical Waste, –Plastic Waste	1275/- 125
Water and Air Effluents Treatment Handbook	1275/- 125
The Complete Guide on Industrial Pollution Control	1275/- 125
The Complete Book on Managing Food Processing Industry Waste	1275/- 125
Handbook on Organic Waste for Biological Treatment, Liquid Manure into a Solid, Tomato Waste Water Treatment, Oxalic Acid from Jute Stick, Cotton Processing Waste, Fish Waste, Agro-Industrial Wastes, Bioconversion of Pretreated Wheat Straw and Sunflower Stalks to Ethanol, Agricultural Waste Treatment, Waste of Dehydrated Onion, Beef-Cattle Manure Slurry, Meat Meal and Algae for Calves, Wastes from Large Piggeries, Pig Waste, Oxytetracycline, Methane from Cattle Waste	1275/- 125
Handbook on Medical and Surgical Disposable Products (Blood Bags, Plastic Gloves, I.V. Cannula, Infusion Set, Gowns, Masks, Catheter, Cotton and Bandage, Surgical Wear, Syringes)	1775/- 150
Disposable Products Manufacturing Handbook (Plastic Cups, Cutlery, Paper Cups, Banana Leaf Plates, Facial Tissues, Wet Wipes, Toilet Paper Roll, Sanitary Napkins, Baby Diapers, Thermocol Products, PET Bottles)	1575/- 150
The Complete Book on Biomass Based Products (Biochemicals, Biofuels, Activated Carbon)	1575/- 150
The Complete Technology Book on E-Waste Recycling (Printed Circuit Board, LCD, Cell Phone, Battery, Computers) 3rd Rev. Edn.	1975/- 150
The Complete Book on Waste Treatment Technologies (Industrial, Biomedical, Water, Electronic, Municipal, Household/ Kitchen, Farm Animal, Dairy, Poultry, Meat, Fish & Sea Food Industry Waste)	1675/- 150
Manufacture of Value Added Products from Rice Husk (Hull) and Rice Husk Ash (RHA) (Precipitated Silica, Activated Carbon, Cement, Electricity, Ethanol, Hardboard, Oxalic Acid, Paper, Particle Board, Rice Husk Briquettes, Rice Husk Pellet, Silicon, Sodium Silicate Projects) 2nd Rev. Edition	1400/- 150
Medical, Municipal and Plastic Waste Management Handbook	1275/- 125
The Complete Book on Biological Waste Treatment and their Utilization	1675/- 150
Handbook on Biofuel, Ethanol and Bioenergy Based Products	1875/- 150

WOOD AND ITS DERIVATIVES

The Complete Technology Book on Wood and Its Derivatives	1100/- 125
Bamboo Plantation and Utilization Handbook	1475/- 150

HERBAL PRODUCTS, AYURVEDIC, HERBAL & UNANI MEDICINES, DRUGS, NEEM, HERBS & MEDICINAL PLANTS CULTIVATION, COSMETICS, NATURAL PRODUCTS, JATROPHA

Handbook on Unani Medicines with Formulae, Processes, Uses and Analysis (2nd Revised Edition)	1695/- 150
Handbook on Herbal Drugs And Its Plant Sources	1000/- 100
Herbal Foods And Its Medicinal Values	1275/- 125
Herbal Cosmetics & Ayurvedic Medicines (Eou) (3rd Rev. Edn.).	1475/- 150
Handbook on Ayurvedic Medicines with Formulae, rocesses & Their Uses (2nd Rev. Edn.)	1475/- 150
Herbal Cosmetics Handbook (3rd Revised Edition)	1875/- 150
The Complete Technology Book on Herbal Beauty Products with Formulations and Processes	1100/- 125
Modern Technology of Cosmetics	1100/- 100
Handbook of Herbal Products (Medicines, Cosmetics, Toiletries, Perfumes) 2 Vols.	1500/- 220
Herbs Cultivation & Medicinal Uses	975/- 100
Herbs Cultivation & Their Utilization	800/- 100

PROCESS TECHNOLOGY BOOKS

NAME OF BOOKS	₹ / US$
• Medicinal Plants Cultivation & Their Uses	975/- 100
• Compendium of Medicinal Plants	875/- 100
• Compendium of Herbal Plants	975/- 100
• Cultivation And Processing of Selected Medicinal Plants	1175/- 125
• Aromatic Plants Cultivation, Processing and Uses	975/- 100
• Cultivation and Utilization of Aromatic Plants	1100/- 125
• The Complete Book on Jatropha (Bio-Diesel) with Ashwagandha, Stevia, Brahmi & Jatamansi Herbs (Cultivation, Processing & Uses)	1500/- 150
• Handbook on Medicinal Herbs With Uses	1075/- 125
• Aloe Vera Handbook Cultivation, Research Findings, Products, Formulations, Extraction & Processing	1275/- 125
• Handbook on Herbs Cultivation & Processing	875/- 100
• Handbook of Neem & Allied Products	975/- 100
• Handbook on Herbal Medicines	750/- 100
• Handbook on Cosmetics (Processes, Formulae with Testing Methods)	1675/- 150
• Handbook on Drugs from Natural Sources	1175/- 125

ESSENTIAL OILS, AROMATIC CHEMICALS, PERFUMES, FLAVOURS, FOOD COLOURS

• The Complete Technology Book of Essential Oils (Aromatic Chemicals (Reprint 2011)	1275/- 125
• Essential Oil Hand Book	975/- 100
• The Complete Technology Book on Herbal Perfumes & Cosmetics (2nd Rev Edn.)	1275/- 125
• Modern Technology of Perfumes, Flavours and Essential Oils 2nd Edn.	975/- 100
• Food Colours, Flavours And Additives Technology Handbook	1000/- 100
• Food Flavours Technology Handbook	1075/- 125
• The Complete Technology Book on Flavours, Fragrances and Perfumes	1675/- 150
• Perfumes and Flavours Technology Handbook	1875/- 150

SOAPS, DETERGENTS, ACID SLURRY, TOILETRIES & DISINFECTANTS

• Modern Technology of Soaps, Detergents & Toiletries (With Formulae & Project Profiles) (4th Rev. Edn.)	1275/- 125
• Herbal Soaps & Detergents Handbook	1275/- 125
• Handbook on Soaps, Detergents & Acid Slurry (3rd Rev. Edn.)	1575/- 150
• The Complete Technology Book on Detergents (2nd Rev. Edn.)	1100/- 125
• The Complete Technology Book on Soaps (2nd Revised Edn.)	1425/- 150
• Surfactants, Disinfectants, Cleaners, Toiletries, Personal Care Products Manufacturing and Formulations (Phenyl, Naphthalene Ball, Mosquito Coil, Floor Cleaner, Glass Cleaner, Toilet Cleaner, Utensil Cleaning Bar, Liquid Detergent, Detergent Powder, Detergent Soap, Liquid Soap, Handwash, Hand Sanitizer, Herbal Shampoo, Henna Based Hair Dye, Herbal Cream, Shaving Cream, Air Freshener, Shoe Polish, Tooth Paste) 2nd Revised Edition	1895/- 200
• Soaps, Detergents and Disinfectants Technology Handbook (Washing Soap, Laundry Soap, Handmade Soap, Detergent Soap, Liquid Soap, Hand Wash, Liquid Detergent, Detergent Powder, Bar, Phenyl, Floor Cleaner, Toilet Cleaner, Mosquito Coils, Naphthalene Balls, Air Freshener, Hand Sanitizer and Aerosols Insecticide) (3rd Revised Edition)	1595/- 150

GLASS, CERAMICS, COAL, LIGNIN & MINERALS

• The Complete Book on Glass & Ceramics Technology (2nd Revised Edition)	1495/- 150
• The Complete Book on Glass Technology	1625/- 150
• The Complete Technology Book on Minerals & Mineral Processing	2200/- 200
• Handbook on Rare Earth Metals and Alloys (Properties, Extraction, Preparation and Applications)	1875/- 150
• Hand book on Coal, Coke, Cotton, Lignin, Hemicellulose, Wood, Wood-Polymer Composites, Lignocellulosic-Plastic Composites from Recycled Materials, Wood Fiber, Rosin and Rosin Derivatives	1875/- 150

NAME OF BOOKS	₹ / US$

ALUMINIUM, STEEL, FERROUS, NON-FERROUS METALS WITH CASTING AND FORGING, FERROALLOYS & AUTOMOBILE COMPONENTS

• The Complete Technology Book On Hot Rolling Of Steel	1575/- 150
• Steel Rolling Technology Handbook (2nd Revised Edition)	1775/- 150
• The Complete Book on Ferrous, Non-Ferrous Metals with Casting and Forging Technology	1575/- 150
• The Complete Technology Book on Aluminium and Aluminium Products	1450/- 150
• The Complete Technology Book on Steel and Steel Products (Fasteners, Seamless Tubes, Casting, Rolling of flat Products & others)	1625/- 150
• The Complete Book on Ferroalloys (Ferro Manganese, Ferro Molybdenum, Ferro Niobium, Ferro Boron, Ferro Titanium, Ferro Tungsten, Ferro Silicon, Ferro Nickel,Ferro Chrome)	2775/- 250
• Steel and Iron Handbook	1775/- 150
• Handbook on Steel Bars, Wires, Tubes, Pipes, S.S. Sheets Production with Ferrous Metal Casting & Processing	1775/- 150
• The Complete Book on Production of Automobile Components & Allied Products (Engine Parts, Piston, Pin, Piston Ring, Valve, Control Cable, Engine Mounting, Auto Lock, Disc Brake, Drum, Gear, Leaf Spring, Shock Absorber, Silencer, Chain, Cylinder Block, Chassis, Battery, Tyre & Flaps)	2275/- 200

FORMULARY (FORMULATION) BOOKS

• Selected Formulary Book on Cosmetics, Drugs, Cleaners, Soaps and Detergents (2nd Revised Edition)	1475/- 150
• Selected Formulary Book on Inks, Paints, Lacquers, Varnishes and Enamels	1475/- 150
• Selected Formulary Handbook	1475/- 150
• Selected Formulary Book on Petroleum, Lubricants, Fats, Polishes, Glass, Ceramics, Nitrogenous Fertilizers, Emulsions, Leather and Insecticides	2275/- 200

CONSTURCTION MATERIALS, CEMENT, BRICKS, ASBESTOS

• The Complete Book on Construction Materials	1475/- 150
• The Complete Technology Book on Bricks, Cement and Asbestos	1400/- 150
• The Complete Technology Book on Asbestos, Cement, Ceramics and Limestone	1875/- 150
• Handbook on Gypsum and Gypsum based Products (Mining, Processing, Transportation, Handling & Storage, Gypsum Board, Plaster of Paris with Machinery & Equipment Details)	2275/- 200

EMULSIFIERS AND OLEORESINS

• The Complete Book on Emulsifiers with Uses, Formulae and Processes. (2nd Rev. Edn.)	1400/- 150
• Handbook on Oleoresin and Pine Chemicals (Rosin, Terpene, Derivaties, Tall Oil ,Resin & Dimer Acids	2200/- 200

COLD STORAGE, COLD CHAIN & WAREHOUSE

• The Complete Book on Cold Storage, Cold Chain & Warehouse (with Controlled Atmosphere Storage & Rural Godowns) 4th Revised Edition	1575/- 150

EACH DETAILED PROJECT REPORT (BUSINESS PLAN) CONTAINS

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 DetailedProcess 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, plant 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.

Spices and Condiments, Indian Kitchen Spices, Masala Powder

- Chilli Oleoresin
- Curcumin Extraction
- Extraction of Essential Oil and Packing of Ground Spices
- Extraction of Spice Oleoresin (Chilly)
- Indian Kitchen Spices (Masala Powder) Spices Powder and Blended Spices, Readymade Mixes (Red Chilli Powder, Sambhar Masala, Biryani Masala, Chicken Fry Masala, Garam Masala)
- Indian Kitchen Spices (Turmeric, Chilli & Masala Powder)
- Oleoresin of Spices
- Oleoresins of Spices by Steam Distillation Process
- Processed Food & Spices (Spices, Vegetable Sauces, Fruit Pulp)
- Saffron Cultivation

- Spice (Chilli) Oleoresin
- Spice Oil Extraction from Curry Leaves
- Spice Oil or Oleoresins (Extraction of Essential Oil, Cardamom, Jeera, Ajwain, Ginger & Other Spices)
- Spice Powder- Masala Powder (Cryogenic Grinding) Production of (Turmeric, Red Chilli, Coriander, Cumin, Cardamom, Cloves, Cassia, Shah Jeera, & Nutmeg Mace Powder)
- Spices
- Spices (Masala)
- Spices (Turmeric Powder, Red Chilli Powder, Dhaniya Powder, Garam Masala, Sabji Masala, Popcorn Masala)
- Spices (Turmeric, Red Chilli, Dhaniya and Jeera Powder)

- Spices and Masala Grinding, Blending and Packing
- Spices in Pouch Packing
- Spices- Masala Powder Spices Powder, Blended Spices and Readymade Mixes (Mirchi Powder, Turmeric Powder, Sambhar Powder, Biryani Masala)
- Turmeric Oleoresin, Spice Oils and Oleoresins, Curcumin from Curcuma Longa, Extraction of Curcumin
- Turmeric Powder, Coriander Powder and Chilli Powder Processing
- Turmeric, Dhania and Chilli Powder
- Whole Spices Processing (Cleaning Grinding & Packaging)

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

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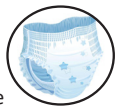
Water Industry (Distilled Water, Packaged Drinking Water, Hydropower, Ice, Mineral Water, Safe Water, Spring Water, Wastewater, Water Purification, Water Resources, Bottled Drinking Water, Water Treatment Chemical, Water Softener, Filter)

» Flavoured Drinking Water
» Flavoured Drinking Water (Still)
» Mineral Water
» Packaged Drinking Water
» Packaged Drinking Water with Pet Bottles

» Packaged Drinking Water with Pet Bottles (1 Ltr) (Automatic Plant)
» Packaged Drinking Water with Pet Glasses (250 Ml) (Automatic Plant)
» Packaged Drinking Water, Soda Water and Pet Bottles
» Water Softener

Disposable Products and Projects from Paper, Plastic, Thermocol, Banana Leaves (Use and Throw Items, Throwing Item, Single Use Items, Disposable Take-Away Packaging, Disposable Food Packaging, Disposable Items Manufacturing)

» Adult Pull-up Diapers
» Baby & Adult Diapers & Sanitary Pads
» Baby Diaper & Sanitary Napkin
» Baby Wet Wipes and Facial Wet Tissue
» Biodegradable and Compostable Disposable Cups and Plates from Sugarcane Bagasse and Wheat Straw
» Biodegradable Diapers and Sanitary Napkins
» Biodegradable Disposable Cups and Plates using Sugarcane Bagasse
» Biodegradable Plastic Bags- Biodegradable Compostable Carry Bag, Eco friendly Bag Production from Corn & Cassava Starch
» Biodegradable Plastic Bags from Corn & Cassava Starch Granules
» Biodegradable Plastic Products
» Biodegradable Plastic Products (Bags, Plates & Glasses)
» Bio-Degradable Products from Sugarcane Bagasse (Plates, Bowls, Spoons and Cups, Biodegradable, Eco-Friendly Cutlery using Rice Husk (Rice Hulls or Rice Husks)
» Bioplastic Carry Bags and Garbage Bags
» Bioplastic Film
» Bioplastic Film using Biodegradable Resin
» Blood Bags
» Coated Dona Plates and Spoons Plastic Glass and Spoon Tissue Paper)
» Compostable & Disposable Tableware from Rice Straw and
» Corrugated Cardboard Boxes
» Disposable Baby Diaper
» Disposable Cigarette Gas Lighter
» Disposable Nitrile (NBR-Nitrile Butadiene Rubber) Gloves



» Disposable Nitrile Examination Gloves- Medical Grade, Powder Free, Disposable, Non Sterile, Food Safe, Textured Surgical & N95 Mask
» Disposable Nitrile Gloves
» Disposable Nitrile Gloves (Powder Free)
» Disposable Paper Plate
» Disposable Plastic Cups, Plates & Glasses
» Disposable Plastic Syringes
» Disposable Plastic Syringes (2ml, 5ml, 10ml and 50ml)
» Disposable Plastic Syringes (General Medical Devices)
» Disposable Plastic Syringes and Needles
» Disposable Plates and Cups from
» Disposable Plates from Banana Leaves
» Disposable Products
» Disposable Products (Knife, Fork & Cutlery Items (Spoon)
» Disposable Products (Thermocol Plate Dona Thali and Glass Paper Coffee and Pepsi Glass Silver
» Disposable Surgical Masks
» Disposable Surgical-Medical-Glove
» Feminine Hygiene Products (Sanitary Napkins & Pads)
» Herbal/Ayurvedic Hand Sanitizer
» IV Cannula and Catheters
» Mackintosh Sheets (Hospital Rubber Sheet) and Surgical Hand Gloves
» Medical Devices & Disposables Industry in India (Disposable Plastic Syringes, Disposable Mask & Gloves, Blood Bags, X-Ray, Ultrasound, ECG, Pacemakers, IV Fluid Sets and other Devices)
» Medical Devices & Surgical Disposables
» Medical Disposables: Disposable Syringes (Self Destructive) with Needles, Catheters and Mask
» Mini Sanitary Napkin

» Nitrile NBR Powder free Medical Gloves (Disposable Nitrile Gloves)
» Nitrile, Vinyl and Latex Disposable Medical Gloves
» Packaged Drinking Water, Soda Water and Pet Bottles
» Paper Cups
» Paper Cups, Plates and Boxes
» Paper Napkins, Facial Paper & Toilet Rolls from Tissue Paper Rolls
» Paper Plate with Silver Lamination
» PET Bottle from PET Resin
» Printed Paper Shopping Bags
» Rice Husk Based Biodegradable Cutlery
» Sanitary Napkin & Baby Diapers
» Sanitary Napkin (Low Investment Project)
» Sanitary Napkins
» Sterile Disposable Plastic Syringes
» Surgical & Examination Latex Rubber Gloves
» Surgical & N95 Masks
» Surgical Disposable Hospital Apparel
» Surgical Disposable Manufacturing Unit (Surgeon Gowns, Patient Gowns, Bed Sheets, Drapes, Surgeon Caps and Sheets)
» Thermocol Cups, Glass and Plates
» Thermocol Glass and Plates (Low Investment Project)
» Thermocole (EPS) Cup, Glass & Plates
» Thermocole Sheet & Its Moulded Products
» Thermoforming Plant for Manufacturing of Disposable Glass
» Tissue Paper
» Tissue Paper from Recycled Paper
» Toilet Paper Rolls, Facial Tissue & Paper Napkins
» Toothpaste
» Waste Rice Husk Powder
» Wheat Straw

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

Cosmetics, Perfumery Compounds, Flavours & Essential Oils, Essential Perfume Oil, Cosmetics Fragrances, Perfumes & Fragrances, Aromatic Oils, Chemicals, Attar, Essences, Toiletries, Nail Polish, Hair Care, Personal Care, Skin Care, Makeup, Beauty Products

- Aerosol Spray [Rose Flavour Tube, Night Queen, Jasmin]
- Amla (Indian Gooseberry) Hair Oil Based on Vegetable Oil
- Aromatic Herbal Shampoo
- Aromatic Perfumery Compound
- Bindiya (Shilpa Type)
- Bleach Liquor
- Cosmetics Perfume Gel, Nail Polish Remover Liquid, Hair Gel, Face Wash Gel, Face Cream, Talcum Powder, After Shave Lotion Liquid, Shaving Cream Gel and Hand Wash Gel
- Cotton Buds
- Cresols
- Essential Oil from Flowers (Rose Oil)
- Essential Oil from Lily, Mogra, Nishigandha
- Extraction of Essential Oil and Packing of Ground Spices
- Extraction of Neem Oil
- Fractional Distillation Unit (For Lemongrass, Palmarosa and Citronella)
- Ginger (Dry, Powder, Flakes, Oil) & Garlic (Powder, Flakes, Oil) Ginger Oil (Super Critical Co2 Process)
- Hair Dye Henna Based (Black, Burgundy, Chasetnut & Special Brown Colours)
- Herbal Body Care Beauty Products (Herbal Body Wash, Shampoo, Hair Conditioners, Soaps, Lotions and Scrubs)
- Herbal Cosmetics (Shampoo, Conditioner, Face Wash, Body Wash, Massage Oil, Hair Oil, Face Cream, Massage Cream, Lip Balm)
- Herbal Hair Oil (Banphool Type)
- Light & Fragrant Hair Oil with Coconut Oil & Mineral Oil
- Menthol Crystals
- Perfumery Chemicals (Synthetic & Natural)
- Perfumery Compounds (Fragrance Oil)
- Petroleum Jelly
- Plastic Collapsible Tubes for Tooth Paste, Cream, Gel, Cosmetics & Pharmaceutical
- Resin for Nail Polish (Polycondensation Resin (Polyester, Alkyds), Epoxy Tosylamide Resin, Solvent Based Acrylic Resin)
- Shampoo & Creams
- Shaving Cream
- Shoe Polish
- Sindur, Roli, Bindi & Gulal
- Sorbitol
- Steel Safety Pins
- Talc Manufacture from Talc Ore (Cosmetic Grade)
- Talcum and Compact Face Powder
- Toothpaste
- Xanthan Gum (Food and Oil Drilling Grade)

Lucrative Business Ideas for Startup

Production Business of
Fiberglass Wool Ceiling Tiles

Fiberglass ceiling tiles are primarily constructed of glass fibres encapsulated in polymers and offer a number of benefits in a variety of settings. These are frequently environmentally beneficial building materials; lighter tiles can also be thrown directly to the ceiling without sagging or ageing harm. Fiberglass, often known as glass wool, is one of most effective insulation materials available, both in terms of thermal and acoustic insulation. Even when in direct and continuous contact with flames, it is a non-combustible material. It does not produce toxic gases or smoke, which are two of the most dangerous health and life threats in the case of a fire. Glass wool is non-combustible. It does not emit noxious fumes or smoke, which are two of the most dangerous health and life risks associated with a burn. Fiberglass acoustic ceiling tiles are lightweight, easy to handle, and provide the finest sound absorption.

The fibre ceiling industry in India has a bright future, with prospects in both the commercial and residential sectors. Increased need for acoustic and thermal insulation, rising disposable income in developing nations, and altering consumer preferences toward the aesthetics of house and business structures are all projected to boost the industry. Market dynamics are likely to profit from the usage of sustainable and innovative building solutions that include the use of eco-friendly materials for ceilings, floors, and walls. The high raw material costs of ceiling tiles are stifling the market's expansion. Furthermore, ceiling tile installation is expensive because it demands the services of experienced professionals.

PROJECT COST ESTIMATE
Capacity

Fiberglass Wool Ceiling Tiles	: 3,000 Sq. Mtr. Per Day
Plant & Machinery	: ₹ 482 Lakhs
Cost of Project	: ₹ 1082 Lakhs
Rate of Return	: 27%
Break Even Point	: 52%

Controlled Atmosphere Cold Storage

Controlled atmosphere storage is a system for holding produce in an atmosphere that differs substantially from normal air in respect to CO2 and O2 levels. Controlled atmosphere storage refers to the constant monitoring and adjustment of the CO2 and O2 levels within gas tight stores or containers. Controlled atmosphere (CA) storage involves maintaining an atmospheric composition that is different from air composition (about 78% N2, 21% O2, and 0.03% CO2); generally, O2 below 8% and CO2 above 1% are used. Control Atmosphere cold storage mainly used for long-term storage of perishable fruits. In this type of cold storage, apart from temperature concentration of oxygen, carbon dioxide, ethylene and nitrogen is maintain as per the requirement of the storage material.

The estimated annual production of fruits and vegetables in the country is about 130 million tonnes accounting to 18 per cent of our agricultural output. Moreover, the lack of cold storage and cold chain facilities are becoming major bottlenecks in tapping the vast potential. Govt. of India promoting cold storage warehouse investments by providing subsidies up to 50% to 75% on Investment. The nationalized banks of India are also proving loans for cold storage projects. In the recent time cabinet also approved the amount of 6000 crore rupees for mega food processing projects. The country requires 3.5 crore tonne capacity cold storage facilities and this is a right time for starting a business in cold storage.

PROJECT COST ESTIMATE
Capacity

CA Cold Store for Seasonal Fruits Like Apple	: 10,000 MT Per Annum
Plant & Machinery	: ₹ 690 Lakhs
Cost of Project	: ₹ 1195 Lakhs
Rate of Return	: 29%
Break Even Point	: 53%

Setup an Industrial Park

Parks, community halls, libraries, commercial complexes, banks, and post offices are all available in the Industrial Park. An "Industrial Park" in India refers to a project in which plots of developed space or built-up space, in combination with common facilities and high-quality infrastructure, are established and made available to units for the purposes of industrial or commercial activity.

Historically, there have been two reasons for industrial parks. First, providing functioning infrastructure in a geographically constrained location is significantly easier to plan, especially for governments with delivery constraints. Second, the concentration of firms can have significant spillover effects both inside and outside the park, such as information spillovers, such as knowledge and technology; enterprise specialization and division of labour; the development of skilled labour markets; and the development of markets surrounding the parks.

The integrated park is made up of clusters of homes and commercial businesses that are connected by roadways, convenience stores, water treatment plants, and drainage and sewage services. With cities becoming increasingly crowded and lacking future development potential, integrated parks have been highlighted as a viable option.

PROJECT COST ESTIMATE

Capacity:

Type 1 Industrial Plots Area 500 sq.mt. Size	: 90 Nos.
Type 2 Industrial Plots Area 1000 sq.mt. Size	: 40 Nos.
Type 3 Industrial Plots Area 2000 sq.mt. Size	: 20 Nos.
Type 4 Industrial Plots Area 5000 sq.mt. Size	: 8 Nos.
Residential Appartment 2 BHK 112.42 sq.mt. Size	: 225 Nos.
Residential Appartment 3 BHK 161.9 sq.mt. Size	: 288 Nos.
Plant & Machinery	: ₹ 329 Lakhs
Cost of Project	: ₹ 30642 Lakhs
Rate of Return	: 26%
Break Even Point	: 18%

The ideal urbanization option is an integrated park. In terms of economic and societal factors, convenience is the primary goal. An Integrated Industrial Park combines residential and working opportunities in one location. Residential, infrastructure, and basic utilities, as well as job possibilities, are all available in one location.

Urea Formaldehyde UF85

Urea-formaldehyde (UF), also known as urea-methanal, so named for its common synthesis pathway and overall structure, is a non-transparent thermosetting resin or polymer. It is produced from urea and formaldehyde. These resins are used in adhesives, finishes, particle board, medium-density fibreboard (MDF), and molded objects. UF and related amino resins are a class of thermosetting resins of which urea-formaldehyde resins make up 80% produced globally. Examples of amino resins use include in automobile tyres to improve the bonding of rubber to tyre cord, in paper for improving tear strength, in molding electrical devices, jar caps, etc.

In 2019, the market size of Urea Formaldehyde is 8390 million US$ and it will reach 12800 million US$ in 2025, growing at a CAGR of 5.4% from 2019. Wood flour and thermoplastic-modified urea-formaldehyde (UF) suspensions are blended to form a wood composite which can sustain impacts better than other similar composites. Wooden furniture market on a global forum is expected to grow at a CAGR of around 5% during 2018-2022. However, volatile prices and availability of raw materials, availability of substitute compounds, and stringent government environment regulations are the key restraints for the urea formaldehyde market.

PROJECT COST ESTIMATE
Capacity

Capacity	: 2 MT Per Day
Plant & Machinery	: ₹ 23 Lakhs
Cost of Product	: ₹ 125 Lakhs
Rate of Return	: 28%
Break Even Point	: 66%

Xanthan Gum

Xanthan gum is a polysaccharide with many industrial uses, including as a common food additive. It is an effective thickening agent and stabilizer to prevent ingredients from separating. It is used to make medicine. Xanthan gum is used for lowering blood sugar and total cholesterol in people with diabetes. It is also used as a laxative. Xanthan gum is used as a thickening and stabilizing agent in foods, toothpastes, and medicines.

Xanthan gum is also employed in oil-in-water emulsions to help stabilize oil droplets against coalescence. As a result, the demand in this application segment is expected to grow at a CAGR of 5.1% from 2014 to 2020.The demand in food & beverage was valued at USD 310.3 in 2013 and is expected to grow at a CAGR of 6.0% from 2014 to 2020. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE

Capacity:

Xanthan Gum Food Grade	: 720 Kgs./Day
Xanthan Gum Oil Grade	: 340 Kgs./Day
Plant & Machinery	: ₹ 120 Lakhs
Cost of Project	: ₹ 313 Lakhs
Rate of Return	: 25%
Break Even Point	: 53%

Geotextiles *for Road Construction*

Geotextiles were used in roadway construction to stabilise roadways and their edges. These early geotextiles were made of natural fibres, fabrics or vegetation mixed with soil to improve road quality, particularly when roads were made on unstable soil. Recently have geotextiles been used and evaluated for modern road construction. Geotextiles today are highly developed products that must comply with numerous standards. Geotextiles should fulfill certain requirements like it must permit material exchange between air and soil without which plant growth is impossible, it must be penetrable by roots etc. and it must allow rain water to penetrate the soil from outside and also excess water todrain out of the earth without erosion of the soil.

Geotextiles market in India is forecasted to grow at CAGR 12% during 2016–2025. Ongoing and upcoming highway projects under green highway mission by Ministry of Road Transport and Highway (MoRTH), coupled with increasing investments to improve and expand road and railway networks across the country are expected to fuel demand for geotextiles in India through 2026.Railway is one of the fastest emerging application areas for geotextiles in India, as upcoming metro rail, bullet train and high-speed train projects in the country are expected to fuel geotextile demand during 2017-2026. Other application areas for geotextiles include erosion control, drainage, etc.

PROJECT COST ESTIMATE
Capacity

Capacity	: 4000 Kgs Per Day
Plant & Machinery	: ₹ 339 Lakhs
Cost of Project	: ₹ 771 Lakhs
Rate of Return	: 28%
Break Even Point	: 58%

Production of Menthol Crystal from Mentha Oil

Menthol is a crystalline white substance. It can be made from natural sources or synthetically. The melting point of natural or synthesisedlaevo menthol is between 41 and 44°C, making it the sole therapeutically active form. Some manufacturers categorise crystals based on their shape and size, and thus employ a variety of terminology, such as bold crystals, medium crystals, medium extra crystals, and medium extra-large crystals.

Menthol crystals are made by extracting mint essential oil (menthe arvensis), freezing the oil, and then crystallising the menthol. The crystals are crystalline and more oblong in shape, like rock crystals. They have a nice minty fresh odour and are transparent to white. Alcohol and oils are soluble in it. Menthol crystals are excellent inhalants in and of themselves, and they're simple to use into recipes.

Mentha Oil, with the scientific name Menthapiperita, is also known as Menthol Liquid and comes from the United States of America. The oil is extracted by a steam distillation method and has a minty, spicy fragrance. The oil aids digestion and has a relaxing impact on muscle spasms, pains, and aches thanks to its invigorating, stimulating, and uplifting aroma.

Menthol crystals are obtained primarily from natural sources, and as a result, they are rising in popularity in both developed and developing countries. The expansion of natural based products from many industries is being pushed by manufacturers' increasing focus on natural and sustainable products. The cosmetics sector is highly regulated, thus natural-based raw ingredients are in great demand when producing cosmetics.

PROJECT COST ESTIMATE

Capacity:

Menthol Crystal	:	1,000 Kgs Per Day
Mentha Oil	:	333.3 Kgs Per Day
Plant & Machinery	:	₹ 145 Lakhs
Cost of Project	:	₹ 592 Lakhs
Rate of Return	:	27%
Break Even Point	:	54%

Business of Cenosphere Processing from Fly Ash

The name Cenosphere is made up of two Greek words: Kens (hollow) and Sphaira (sphaira) (sphere). Cenospheres are inert hollow spheres made primarily of silica and alumina that are filled with air or inert gas. Cenospheres are a naturally occurring byproduct of pulverised coal-fired boiler combustion.

They're found floating on the fly ash lagoon's surface. When coal combustion ash is in a molten condition, it forms cenosspheres. The temperature of the molten particles is rapidly quenched by flowing with the combustion gas stream, causing them to 'freeze in' a spherical shape. Any gas bubbles that form within the molten particles are confined within the spheres as well. Cenospheres are formed by these bubbles, which can appear in many forms within the 'frozen' particles or as single, concentric forms nearly as large as the diameter of the particles.

The proportion of particles with densities smaller than 2 gm/cm3 in fly ash produced after the burning of Kentucky No. 9 coal may be as high as 87 percent in San Miguel coal fly ash. These results show that if selective extraction could be done properly, cenospheres with a density of less than 2 gm/cm3 may be harvested from ash in its dry form. Cenospheres are one-of-a-kind free-flowing powders made up of hard-shelled, hollow, tiny spheres.

Cenospheres are a versatile filler that can be used in a wide range of commercial and industrial products. Oil well cementing and PVC cushion vinyl flooring are two examples. Fillite, on the other hand, is employed in each scenario because of its specific features, including as strength, low density, and chemical resistance.

PROJECT COST ESTIMATE

Capacity

Cenosphere	:	8 MT Per Day
Plant & Machinery	:	₹ 60 Lakhs
Cost of Project	:	₹ 437 Lakhs
Rate of Return	:	27%
Break Even Point	:	46%

Lucrative Business of Milk Powder
(Baby Milk for 0 to 5 year, Milk Powder for Coffee and Tea)

Milk is a vital component of human nutrition. It's tasty, easy to digest, and nutrient-dense. Proteins, fat, sugar, minerals, and a variety of vitamins are all present in large amounts. India is only second to the United States of America and the Soviet Union in terms of milk production in the world. However, India's milk production is insufficient to meet the needs of its huge population, as daily average intake per person is less than half of the ideal requirement of roughly 310 grammes.

Fresh milk products, concentrates, and dried goods are all available as options for milk and milk products. Fresh milk and concentrates can be substituted with milk powders. Converting liquid dairy streams to powder provides a handy and steady supply of milk solids.

From 2018 to 2025, the global milk powder market is expected to increase at a CAGR of 4.4 percent, from $27,783.3 million in 2017 to $38,086.1 million in 2025. Milk powder is a dry dairy product made by evaporating milk to dehydrate it. Making milk powder has the goal of extending the shelf life of milk without the need of a refrigerator. Whole milk powder, skimmed milk powder, dairy whitener, and various varieties of milk powder are available.

PROJECT COST ESTIMATE

Capacity:

Baby Milk Powder 400 gms Size Pack	: 62,500 Nos. Per Day
Milk Powder for Tea & Coffee 200 gms Size Pack	: 25,000 Nos. Per Day
Milk Powder for Tea & Coffee 500 gms Size Pack	: 10,000 Nos. Per Day
Plant & Machinery	: ₹ 948 Lakhs
Cost of Project	: ₹ 2711 Lakhs
Rate of Return	: 29%
Break Even Point	: 50%

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