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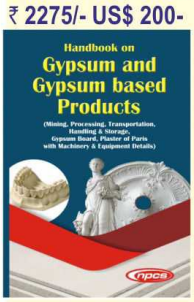
Handbook on Gypsum and Gypsum Based Products

(Mining, Processing, Transportation, Handling & Storage, Gypsum Board, Plaster of Paris with Machinery & Equipment Details)

₹ 2275/- US$ 200-



Gypsum is chemically known as calcium sulfate dihydrate and it contains calcium and sulfur, which is bound to oxygen and water. Gypsum is an abundant mineral and takes various forms including alabaster, which is a material, used in decoration and construction. This is a non-toxic mineral and it can be helpful to humans, animals, plant life, and the environment. The majority of gypsum produced is used to manufacture gypsum board or building plasters and it is used in many other ways. Gypsum products are used in dentistry, medicine, homes, and industry. In homes, gypsum plaster is used to make walls; in industry, it is used to make molds. Three types of gypsum products are plaster, stone, and high-strength or improved stone. The Gypsum and the Gypsum products are used for construction purposes. It is also used in industry for making pottery, moulds etc. It is used by orthopedics to make plaster casts and helps the dentist for the cast preparation, models and dies, impression material, investment material, mounting of Casts, as a mold material for processing of complete dentures etc.

The global gypsum board market size is anticipated to exhibit a CAGR of 11.9% in terms of revenue. Increasing utilization of gypsum boards in decorative and partitioning applications in residential constructions is anticipated to drive the market. The demand for gypsum boards is driven by the residential sector, where the product is widely used in multi-family constructions for room partitioning. Durability and lightweight coupled with easy handling of the product are some of the factors anticipated to propel the demand.

The major contents of the book are Mining, Processing, Transportation, Handling & Storage, Gypsum Board, Plaster of Paris for gypsum, Plant Layout, Process Flow Chart and Diagram, Plant & Machinery Suppliers and Photographs of Machineries.

This book is one-stop guide to one of the fastest growing sector of the Gypsum and Gypsum based Products, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on gypsum and gypsum based Products. It serves up a feast of how-to information, from concept to purchasing equipment.

फूड प्रोसेसिंग इंडस्ट्रीज़

खाद्य प्रसंस्करण एवं कृषि आधारित उद्योग परियोजनाएं

(2nd Revised Edition)

₹ 1475/- US$ 150-

खाद्य प्रसंस्करण उद्योग का मतलब खाने की वस्तुओं की प्रोसेसिंग कर उसे नए रूप में पेश करने के कारोबार से है। भारत में लोगों की तेजी से बदलती लाइफ स्टाइल ने खाद्य प्रसंस्कृत उत्पादों की मांग में लगातार बढ़ोतरी की है । ऐसे में कारोबारी इस क्षेत्र में कम निवेश और बेहतर कारोबारी सहायता के जरिए एक नया मुकाम बना सकते हैं, जिसके लिए खाद्य प्रसंस्करण उद्योग मंत्रालय कई सारी योजनाएं चला रहा है। इसके तहत नई इकाई लगाने, मौजूदा इकाई का आधुनिकीकरण करने, तकनीकी सहायता आदि के लिए सहायता मिल रही है। भारत के खाद्य प्रसंस्करण उद्योग क्षेत्र में प्रसंस्कृत खाद्य के उत्पादन और निर्यात की पर्याप्त संभावनाएँ हैं। खाद्य बाजार लगभग 10.1 लाख करोड़ रुपये का है, जिसमें खाद्य प्रसंस्करण उद्योग का हिस्सा 53% अर्थात 5.3 लाख करोड़ रुपये का है। नौकरी के लिए सुबह-शाम की भागमभाग, ट्रैफिक और तमाम तरह की अन्य आपाधापी से भरी दिनचर्या के बीच किसे फुर्सत है कि खाना तसल्ली से रोजाना बनाया और खाया जाये। इसका समाधान इंस्टेंट एवं प्रोसेस्ड अथवा रेडी टू ईट पैक्ड फूड के रूप में देश-विदेश में देखा जा सकता है। पहले खानपान की ऐसी आदतें सिर्फ पश्चिमी देशों तक ही सीमित थीं पर आज भारत जैसे विकासशील देशों में भी बड़े पैमाने पर यह प्रचलन आम होता जा रहा है।

इसी बदलाव का नतीजा है कि वैश्विक स्तर पर प्रोसेस्ड फूड इंडस्ट्री का कारोबार निरंतर गति से बढ़ रहा है। भारत में खाद्य प्रसंस्करण कम्पनियों के लिए प्रचुर संभावनाएँ हैं। खाद्य प्रसंस्करण उद्योग के विभिन्न उत्पादों की मांग तेजी से बढ़ रही है। इसका कारण भारत के लोगों की प्रतिव्यक्ति आय में वृद्धि होना है, जिसके फलस्वरूप वे उत्कृष्ट गुणवत्ता वाले खाद्य पदार्थों पर खर्च करने की स्थिति में हैं। भारतीय खाद्य प्रसंस्करण उद्योग उत्पादन, खपत, निर्यात और विकास संभावना की दृष्टि से विश्व में सबसे बड़ा उद्योग है। उपभोक्ता की बढ़ती सम्पन्नता ने खाद्य प्रसंस्करण क्षेत्र में विविधिकरण के लिए नए अवसर खोल दिए हैं और विकास के नए मार्ग खोल दिए हैं। प्रसंस्कृत और सुविधाजनक खाद्य की मांग शहरीकरण, जीवन शैली में बदलाव और लोगों की भोजन की आदत में परिवर्तन के कारण स्थायी रूप से बढ़ रही है। तदनुसार भारतीय उपभोक्ता को नए उच्च गुणवत्ता वाले खाद्य उत्पाद परोसे जा रहे हैं जिसका निर्माण अत्याधुनिक प्रौद्योगिकी का उपयोग करके किया गया है।

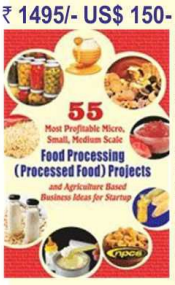
इस पुस्तक में विभिन्न उद्योगों की जानकारी तथा **Cost Estimation (Capacity, Working Capital, Rate of Return, Break Even Point, Cost of Project)** को शामिल किया गया है, जैसे: बेकरी उद्योग, रेडी-टू- ईट फूड, बेवरेजेज, खाद्यान्नों की पिसाई यूनिट, खाद्य तेल से संबंधित उद्योग, फल और सब्जी की पैकेजिंग उद्योग, डेयरी, बीयर एवं एल्कोहोलिक पेय पदार्थ, दुग्ध एवं दुग्ध-निर्मित उत्पाद, अनाज प्रसंस्करण, उपभोक्ता खाद्य वस्तुएँ; अर्थात् कन्फेक्शनरी, चॉकलेट और कोको उत्पाद, सोया-निर्मित उत्पाद, पानी बोतल प्लांट, उच्च प्रोटीनयुक्त खाद्य पदार्थ, सॉफ्ट ड्रिंक, खाने और पकाने के लिए तैयार उत्पाद, नमकीन, स्नैक्स, चिप्स, बिस्कुट, नूडल्स और इंस्टेंट नूडल्स, एडिबल नट्स प्रसंस्करण और पैकेजिंग, ज़र्दा, पान मसाला उद्योग, डायबिटिक फूड और मसाला उद्योग आदि। **Sample Plant Layout and Photographs of Plant and Machinery with Suppliers Contact Details** भी दिए गए है।

कौन सा उद्योग मेरे लिए अच्छा रहेगा ?

यह सवाल हर उद्यमी के जहन में रहता है, कितनी लागत लगेगी?क्या मुनाफा होगा? कितना माल बनेगा? इस पुस्तक में 178 फूड प्रोजेक्ट्स का विवरण दिया गया है। जो उद्योग चुनने में काफी मददगार होगा। अपना स्वयं का उद्योग स्थापित करें और राष्ट्र की उन्नति में भागीदार बने। इस पुस्तक की मदद से उद्यमी को फूड प्रोसेसिंग सेक्टर में सही उद्योग के चयन में सहायता मिलेगी। यह पुस्तक उद्यमियों, एंटरप्रेन्योर, कृषिविदों, कृषि विश्वविद्यालयों, खाद्य तकनीशियनों और खाद्य उत्पादों के निर्माण के क्षेत्र में रुचि रखने वाले अन्य लोगों के लिए उपयोगी साबित होगी ।

55 Most Profitable Micro, Small and Medium Scale Food Processing (Processed Food) Projects and Agriculture Based Business Ideas for Startup (2nd Revised Edition)

₹ 1495/- US$ 150-



Food processing is a way or technique that is used to convert raw foods into well-cooked and well preserved eatables for both humans and animals. Food processing uses raw, clean, harvested crops or slaughtered and butchered animals and turns these into food products for daily consumption. A number of products are nutritious, easy to cook and have a long shelf life. They are packed in an attractive manner and are highly marketable.

The food processing industry plays a vital role in the economy of any country because it links agriculture to industry. The food processing industry is responsible for diversification of agriculture, improvement of value-added opportunities, and creation of excess that can be exported. The food processing industry of India is one of the largest in the world in terms of manufacture, use, export, and development. The sector has immense potential to contribute to growth and employment opportunities of the country.

Rapid globalization and development of economy has taken a toll on the lives of consumers, particularly those residing in urban areas. Employment growth and increased work pressure in organizations leaves consumers with little time for personal care. Additionally, more product offerings by food companies and marketing on a large scale has altered people's appetite- they demand more and more processed food items every day. These are some of the reasons for the steady growth of food processing industry in India in the past few years. Some of the biggest companies making their presence felt in the Indian market are Unilever, Dabur, Nestle, Nissin, Cadbury's, Kelloggs', Godrej, ITC, Britannia, Kohinoor Foods Ltd., Mother Dairy, Pepsico India, Marico Ltd, Patanjali, MTR Foods etc.

Food processing industry is of enormous significance for any country's development because with the changing lifestyle, there has been a consistent increase in preference and demand for packaged foods amongst the population. These can be seen as a great opportunity by the packaging companies. The agricultural strength amalgamated with a various other factors like competent market price and favorable government policies have further aggrandized the food packaging sector.

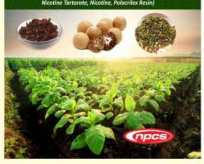
The Major Contents of the are Book Soy Flour & Milk, Starch Derivatives, Saccharin, Tomato Paste, Edible Corn Oil, Malt, Instant Noodles, Garlic Oil and Powder, Cattle Feed, Banana Wafers, Biscuits, Bread, Candy, Chocolates, Potato Chips, Rice Flakes (Poha), Corn Flakes, Baby Cereal Food, Fruit Juice, Milk Powder, Paneer, Papad, Ghee, Extruded Food (Kurkure Type), Instant Tea, Jam & Jelly, Khakhra, Soft Drinks, Spices, Sweet Scented Supari, Cake & Pastry, Banana Chips, Papad, Besan, Pickles, Ice-Cream Cones, Honey, Flour Mill, Tutti-Fruitti, Confectionery, Noodles, Ice Candy, Namkeen, Vermicelli, Mango Pappad (Aam Papad), Chilli Powder, Popcorn, Supari Chips, Revadi and Gazak, Mava, Tomato Sauce and Ketchup, Ice Cream, Baking Powder, Moong Dal Bari, Packaged Drinking Water With Pet Bottles, Food Packaging & Labelling, Good Manufacturing Practices in Food Industry, Manufacturing Process, Process Flow Diagrams, Addresses of Plant & Machinery Suppliers, Photographs of Machineries.

It will be a standard reference book for professionals, entrepreneurs, agriculturists, agriculture universities, food technologists, those studying and researching in this important area and others interested in the field of Food products manufacturing.

Manufacture of Pan Masala, Tobacco and Tobacco Products

(Tobacco Cultivation, Chewing Tobacco, Cigarettes, Bidi, Cigars, Khaini, Zarda, Katha, Mouth Freshener, Pan Chatni, Kimam, Sweet Supari, Nicotine Sulphate,USP Nicotine, Nicotine Tartarate, Nicotine, Polacrilex Resin) 2nd Revised Edition

₹ 2225/- US$ 200-



Tobacco comes from a leafy plant that tends to grow in warm tropical areas. It is famously grown all over the Caribbean, where the warm, sunny conditions make for a perfect growing climate. Tobacco is usually smoked as a nicotinic stimulant and is mostly processed, rolled and dried before being smoked. Different geographies produce different types of the plant. The taste and flavor of the leaves are the characteristic trademarks of different types. The process of curing also determines the type of tobacco.

Tobacco products include cigarettes, cigars, loose pipe tobacco, chewing tobacco, and snuff. These products contain the dried, processed leaves of the tobacco plant nicotiana rustica or nicotiana tabacum. All tobacco contains nicotine, an addictive drug. Today's tobacco also contains thousands of other chemicals designed to make the products more user-friendly and addictive.

Nicotine is a nitrogen-based compound which dissolves in organic compounds. Tobacco leaves contain plenty of nicotine which evaporates on burning. This nitrogen-based compound is addictive in low amounts and toxic in high doses. Nicotine Sulfate is a potent pesticide, known for its high toxicity.

A large proportion of Indian economy is agro based in which Tobacco is one of the principal cash crops. The tobacco production and its allied products' sales in the country have played a prominent role in the development of nation's economy. India is the largest tobacco market in the world in terms of tobacco consumption. The smokeless tobacco has historically been served as a tradition in India for many decades.

Tobacco Waste or dust is generated at various stages of post-harvest processing of tobacco and also while manufacturing various tobacco products mainly during manufacture of tobacco products like cigarette and Beedi. The types of wastes generated during pre and post-harvest practice of tobacco include suckers, stems, mid ribs, leaf waste and dust.

The main contents of the book are Tobacco Cultivation, Tobacco Diseases and Pests, Organic Tobacco Production, Chewing Tobacco, Cigarettes, Bidi, Cigars, Readymade Khaini, Chewing Tobacco (Khaini), Zarda, BIS Specifications, Katha, Mouth Fresheners, Pan Chutney, Pan Masala, Kimam, Tobacco of Various Grade, Sweet Supari, Nicotine Sulphate, USP Nicotine, Nicotine Tartarate, Nicotine Polacrilex Resin, Smokeless Tobacco (SLT), Hookah, Tobacco Products Manufacturing Processes, E-Liquid (Main Chemicals, Compounds, Components), Additives in Tobacco Products, Additives Products, Packaging & Labeling (Design Trends & Technologies), Plastics in Food Packaging, Packaging Laws and Regulations and Photographs of Machinery with Supplier's Contact Details.

This book is one-stop guide to one of the fastest growing sector of the Pan Masala, Tobacco and Tobacco Products, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on Pan Masala, Tobacco and Tobacco Products. It serves up a feast of how-to information, from concept to purchasing equipment.

Directory & Databases

Offline Business directories are the best thing in today's business world. If you are searching for Buyers, then our Business Directories/Database are the perfect tools for you. We provide Business Directories for high quality business leads. We continue to give you the high value and low cost B2B data. We offer an extensive suite of Directories/ database to assist you in reaching the right businesses and people quickly and easily. Business Directories are used for sales planning, finding Buyers and marketing research to perform business analysis.

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- Our report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- Our report provides vital information on the product like its characteristics and segmentation
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Our Approach

- Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.
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About NPCS

Entrepreneur India, an Industrial monthly magazine on industrial development, technologies & project opportunities aims at simplifying the process of choosing the suitable project for investment. It makes business decisions easier and trouble-free for business leaders, young entrepreneurs, women entrepreneurs, investors, NRI (Non Resident Indian), startups, and professionals looking to start their own venture by providing information about right projects for investment. 'Entrepreneur India' -the right tool for identifying sound investment projects is published by Niir Project Consultancy Services (NPCS) An ISO 9001:2015 CERTIFIED COMPANY - a multidisciplinary project consultancy organization.

NPCS provides reliable consultancy services worldwide and has been excelling its expertise in a wide range of services. The services includes: investment opportunities, technology transfers, pre-feasibility study, business plan, new project identification, project feasibility, identification of profitable industrial project opportunities, thorough analysis of the project, plan all resources & details on capital and operational costs, economic feasibility study of the project, profile analysis, preparation of project profiles / pre-investment studies, market surveys / studies, preparation of techno-economic feasibility reports, funding analysis, market potential study, identification and section of plant / process / equipment, general guidance, technical and commercial counseling for setting up new business.

NPCS is one of the leading players in the industry endowed with the expertise, sound technical knowledge and intellectual asset. NPCS is a repository of reliable professional information for the entrepreneurial fraternity of India and has well experienced professionals in market research comprising of consultants, experts, field executives, researchers and analysts from different industries and sectors. We strive to provide a global platform for the entire entrepreneurial ecosystem by providing right project for investment, market survey studies and research through our advanced industrial, business and commercial databases.

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2.Auto-focus feature having phone will automatically detect code.
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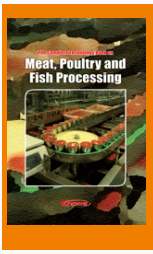

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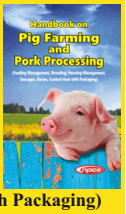

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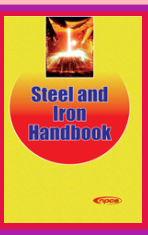

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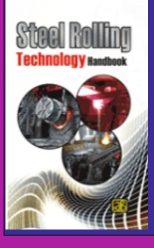

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* Handbook on Speciality Gums, Adhesives, Oils, Rosin & Derivatives, Resins, Oleoresins, Katha, Chemicals with Other Natural Products	1275/- 125
* The Complete Book on Adhesives, Glues & Resins Technology (with Process & Formulations) 2nd Rev. Edn.	1675/- 150
* Phenolic Resins Technology Handbook (2nd Revised Edition)	1895/- 150
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* Modern Technology of Petroleum, Greases, Lubricants & Petrochemicals (Lubricating Oils, Cutting Oil, Additives, Refining, Bitumen, Waxes with Process and Formulations) 3rd Rev. Edn.	1995/- 150
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* 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

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* 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 Revised Edition	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
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* Handbook on Unani Medicines with Formulae, Processes, Uses And Analysis	1 100/- 125
* Handbook on Herbal Drugs And Its Plant Sources	1000/- 100
* Herbal Foods And Its Medicinal Values	1275/- 125
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* Modern Technology of Cosmetics	1 100/- 100
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* The Complete Technology Book on Flavours, Fragrances and Perfumes	1675/- 150
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* Handbook on Soaps, Detergents & Acid Slurry (3rd Rev. Edn.)	1575/- 150
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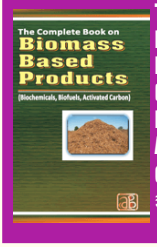
* Steel and Iron Handbook	1775/- 150
* Handbook on Steel Bars, Wires, Tubes, Pipes, S.S. Sheets Production with Ferrous Metal Casting & Processing	1775/- 150

WASTE MANAGEMENT



THE COMPLETE BOOK ON BIOMASS BASED PRODUCTS (BIOCHEMICALS, BIOFUELS, ACTIVATED CARBON)
₹ 1575/- US$ 150

The Complete Technology Book on
E-WASTE RECYCLING
Printed Circuit Board, LCD, Cell Phone, Battery, Computers)
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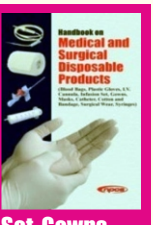
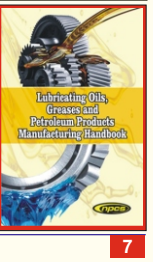
Manufacture of Value Added Products from Rice Husk (Hull) and Rice Husk Ash (RHA)
₹ 1295/- US$ 125

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/- US$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/- US$150

Lubricating Oils, Greases and Petroleum Products Manufacturing Handbook
1475/- US$150



PROCESS TECHNOLOGY BOOKS

NAME OF BOOKS	₹/US$
* 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
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* The Complete Book on Emulsifiers with Uses, Formulae and Processes. 2nd Rev.Edn.	1400/- 150
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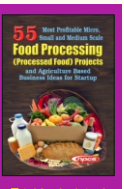
COLD STORAGE, COLD CHAIN & WAREHOUSE	
* The Complete Book on Cold Storage, Cold Chain & Warehouse (with Controlled Atmosphere Storage & Rural Godowns) 4th Revised Edition	1575/- 150

Surfactants, Disinfectants, Cleaners, Toiletries, Personal Care Products Manufacturing and Formulations (3rd Revised Edition)

₹ 1895/- USD$ 200-

55 Most Profitable Micro, Small and Medium Scale Food Processing (Processed Food) Projects and Agriculture Based Business Ideas for Startup



₹1495/- $150-

SELECTED PROJECTS FOR YOU

Extraction of Essential Oil from Lemon Grass

Oil of lemongrass is one of the most important essential Oils. Large quantities are used for the extraction of citral the chief constituent of the oil. Citral is the starting material for the preparation of the important ion ones (a series of aromatics with a powerful violet odour). Lemongrass essential oil is a source of essential vitamins such as vitamin A, B1, B2, B3, B5, B6, folate and vitamin C. It also provides essential minerals such as magnesium, phosphorous, manganese, copper, potassium, calcium, zinc and iron.

Lemongrass is an herb that belongs to the grass family of Poaceae. Lemongrass is also known by Cymbopogon; it is a genus of about 55 species of grasses. Lemongrass essential oil benefit is its skin healing properties. Lemongrass oil can strengthen hair follicles, it also helps to prevent hair loss and keep safe from itchy and irritated scalp. Because of its high citral and geraniol content, lemongrass oil is known to repel bugs such as mosquitoes and ants. Lemongrass is one of several essential oils for anxiety. Lemongrass oil benefits also include its ability to help relieve muscle aches, cramps and spasms. It may also help to improve circulation.

Rising awareness regarding health benefits provided by lemongrass oil is a key factor driving growth of the global market. Growing preference for natural medicines among individuals is resulting into increasing popularity of lemongrass among consumers. In addition, growing popularity of aromatherapy and increasing availability of aromatherapy candles, diffusers, and oils are factors fuelling growth of the global lemon grass market. Furthermore, rising demand for lemongrass oil in pharmaceuticals and cosmetic industries is a factor likely to boost growth of the global market in the coming future.

PROJECT COST ESTIMATE

CAPACITY

Lemon Grass Oil (10 ml Size Pack)	: 1,334 Ltrs Per Day
Citral (as by Product)	: 100,000.0 Ltrs Per Day
Plant & Machinery	: ₹ 43 Lakhs
Cost of Project	: ₹ 607 Lakhs
Rate of Return	: 34.60%
Break Even Point	: 69.69%

Business of Silicone Sealants (Acetic, Natural, MS & PU Types)

Silicones are a diverse family of specialty, high-performance materials that includes reactive silanes, silicone fluids and silicone polymers, which are widely used in a variety of consumer and industrial products. Silicone sealant is a liquid form of adhesive. Typically, it looks, feels, and acts like a gel. It has a different chemical make-up from other organic polymer-based adhesives. Sealants are generally chosen for their ability to fill gaps, resist relative movement of the substrates, and exclude or contain another material. Sealants are generally chosen for their ability to fill gaps, resist relative movement of the substrates, and exclude or contain another material. They are generally lower in strength than adhesives, but have better flexibility. Common sealants include urethanes, silicones, and acrylic systems.

PROJECT COST ESTIMATE

CAPACITY

Silicone Sealant 300 ml Plastic Cartridges	: 2,666.7 Packs Per Day
Silicone Sealant 300 ml Aluminium Foil Packages	: 2,666.7 Packs Per Day
Plant & Machinery	: ₹ 27 Lakhs
Cost of Project	: ₹ 283 Lakhs
Rate of Return	: 30.19%
Break Even Point	: 75.69%

Sealants can also be used as electrical or thermal insulators, fire barriers, and as products for smoothing, filleting or faying. No matter what the application, a sealant has three basic functions:

1. It fills a gap between two or more substrates

2. It forms a barrier by the physical properties of the sealant itself and by its adhesion to the substrate

3. It maintains its sealing property for the expected lifetime, service conditions, and environments.

Silicone sealants are viscous materials that find valuable use as sealants in various industry verticals. These sealants are not the same as common adhesives; they differ in elasticity and strength. The expansion of the automotive & transportation sector and the building & construction sector in the emerging economies will offer major growth opportunities for the silicone sealants market growth. For instance, the infrastructure construction in Asia was estimated at around USD 1,030.7 billion in 2018 and is forecast to exhibit a CAGR of 8.9%, reaching USD 4,622.3 billion by the end of 2023. Increasing construction activity in the region on account of rapid urbanization and industrialization may reinforce silicone sealants market trends through 2027.

Opportunities in Business of Adhesive (Fevicol Type)

Adhesive, also known as glue, cement, mucilage, or paste, is any non-metallic substance applied to one or both surfaces of two separate items that

binds them together and resists their separation. The use of adhesives offers certain advantages over other binding techniques such as sewing, mechanical fastenings, or welding. These include the ability to bind different materials together, the more efficient distribution of stress across a joint, the cost-effectiveness of an easily mechanized process, and greater flexibility in design.

Adhesives are typically organized by the method of adhesion followed by reactive or non-reactive, a term which refers to whether the adhesive chemically reacts in order to harden. Alternatively, they can be organized either by their starting physical phase or whether their raw stock is of natural or synthetic origin.

Physical Properties:

• Adhesion to a variety of substrates allows bonding of dissimilar materials if necessary

• High cohesive strength is desirable

• Flexibility improves peel strength by flexing with peel stress

• High elastic modulus of substrate and adhesive resists stress at the bond line

• High damping capacity of the adhesive dissipates dynamic stresses of vibration, motion, & impact throughout the bond & peel stresses at the bond line

Indian adhesives market is expected to grow at a CAGR of 6%, mainly driven by technological advancements and infrastructure growth. Macroeconomic factors such as low per capita consumption and increasing disposable income will act as catalysts for the growth of the adhesives market in India. From 2019 to 2021, the global adhesives & sealants market will see growth in applications such as paper and packaging, medical and hygiene, as well as consumer and construction.

PROJECT COST ESTIMATE

CAPACITY

Adhesive (Fevicol Type)	: 10.0 MT Per Day
Plant & Machinery	: ₹ 17 Lakhs
Cost of Project	: ₹ 161 Lakhs
Rate of Return	: 26.70%
Break Even Point	: 65.62%

Production of Bicarbonate Cartridge, Acid Concentrate, Hot Disinfectant, Cold Disinfectant

Bicarbonate Cartridge containing sodium bicarbonate powder that produces fresh dialysate online when combined with acid concentrate and pure water. Fast and easy to load, offers different cartridge volumes to accommodate different treatment durations. Ready-to-use liquid acid concentrates for use with bicarbonate concentrate powder. Nipro acid concentrates are easy to handle solutions for preparing fresh online dialysate when combined with bicarbonate concentrate and pure water. Heat Disinfection: Destruction of pathogenic and other kinds of microorganisms by thermal means. Disinfection is a less lethal process than sterilization. It destroys most recognized pathogenic microorganisms but does not necessarily destroy all microbial forms. An effective disinfection solution for the patient, equipment and operators. It is effective in all types of dialysis machines. The cold disinfectant solution eliminates all microorganisms including viruses, bacteria, spores, fungi and even against the most resistant organisms.

Hospitals, diagnostics centers hold strong position in the market due to the complicated procedures involved in the hemodialysis treatment. Therefore, end users play the major role in significantly portion the overall market of bicarbonate cartridges. However, continuing growth in the use of dialysis machine globally will provide a remarkable growth opportunity for bicarbonate cartridges based models.

PROJECT COST ESTIMATE

CAPACITY

Bicarbonate Cartridge 720g	: 166.7 Nos. Per Day
Bicarbonate Cartridge 650g	: 500.0 Nos. Per Day
Acid Concentrate	: 666.7 Nos. Per Day
Hot Disinfectant	: 33.3 Nos. Per Day
Cold Disinfectant	: 33.3 Nos. Per Day
Plant & Machinery	: ₹ 53 Lakhs
Cost of Project	: ₹ 1153 Lakhs
Rate of Return	: 25.28%
Break Even Point	: 35.25%

Profitable Business of IV Fluids *(BFS Technology)*

Intravenous fluids are fluids which are intended to be administered to a patient intravenously, directly through the circulatory system. Fluids are given when someone's body fluid volume falls. There are a number of things which can cause a drop in fluid volume. Intravenous fluids can be broken into two broad groups. Crystalloids such as saline solutions contain a solution of molecules which can dissolve in water.

• Treatment of discarded water and electrolyte metabolism, especially in severe cases.

• Therapy of acid base in balances.

• The volume substitution and volume replacement in surgery of accident victim suffering blood loss.

• Paratral nutrition for severally ill and post-operative patients.

• Dextrose solution is used during postoperative period when sodium extraction is reduced.

PROJECT COST ESTIMATE

CAPACITY

IV Fluids (500 ml Size Bottle)	: 100,000.0 Bottles Per Day
Plant & Machinery	: ₹ 751 Lakhs
Cost of Project	: ₹ 1277 Lakhs
Rate of Return	: 26.48%
Break Even Point	: 54.19%

The global intravenous solutions market size is expected to reach USD 18.9 billion by 2028, the market is expected to expand at a CAGR of 7.9% from 2021 to 2028. The growing incidence rate of chronic diseases such as cancer, increase in the number of premature births, and shortage of I.V. solutions in the U.S. are some of the key factors expected to drive the market. One of the prime areas wherein intravenous (IV) fluids find usage is severe dehydration. Severe dehydration is seen in diseases such as diarrhea, resulting in the depletion of fluids from the body. The ongoing COVID-19 pandemic is expected to have a positive impact on the market. Intensive Care Units (ICU) worldwide are either operating at full capacity or are overcrowded due to the high influx of patients infected with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).

Market Survey Cum Detailed Techno Economic Feasibility Report on All Above Projects are Available. Contact :
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AN ISO 9001:2015 CERTIFIED COMPANY
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Website : www.niir.org • www.entrepreneurindia.co • E-mail : info@niir.org , npcs.india@gmail.com

Start Manufacturing of Menthol Crystal

Menthol is a white crystalline chemical product. It is manufactured either from natural source or isproduced synthetically. Laevo or Racemic form are only therapautically active melting point ofnatural or synthetic laevo menthol lies between 41 and 44°C. Some manufacture classify crystalsaccording to their shape and size and thus many terminologies are used by them e.g. bold crystalmedium crystals, medium extra crystals, medium extra-large crystals. Menthol crystals are great inhalants by themselves and are easily combined into recipes. It is useful as natural pesticide that means it can use pure Menthol in the garden where other insects or honey bee hives to prevent moths.

1. Menthol is a hair growth accelerator; we can use it by adding menthol crystals to hair oil.

2. Menthol crystal also helps in sunburn; it calms sunburns when mixed with aloe vera gel.

3. It reduces black heads and white heads and remove dark sports.

4. Menthol control plague or kills bacteria that can contributes to the development of gingivitis

Menthol crystals are majorly derived from natural sources and therefore these are gaining more importance in developed and developing markets. Increasing focus of manufacturers towards natural and sustainable products is pushing the growth of natural based products from various industries. Cosmetic industry is highly regulated and therefore is demanding natural based raw materials for manufacturing cosmetic products. This is expected to drive the menthol crystals market in coming years.

PROJECT COST ESTIMATE
CAPACITY

Menthol Crystal	: 1,000.0 Kgs Per Day
Dmentha Oil	: 333.3 Kgs Per Day
Plant & Machinery	: ₹ 196 Lakhs
Cost of Project	: ₹ 643 Lakhs
Rate of Return	: 28.87%
Break Even Point	: 52.17%

Profitable Industry of Surgical Methylated Spirit (Denatured Alcohol/Surgical Spirit)

Methylated spirits is a clear, colourless liquid that is commonly used across most industrial industries and is often used within the household. The methylated spirits boiling point is 78 °C and the flashpoint is 11 °C. Methylated spirits is often referred to as denatured alcohol which means that it contains a denaturant in it so it cannot be consumed. Sydney Solvents methylated spirits is 99% methylated spirits with a 1% bitrex in it. If it didn't contain denaturant in the methylated spirits it would be classed as normal alcohol that is safe to drink.

• As a popular home remedy for sterilising and hardening the skin, especially on the feet of hill walkers and runners in order to help prevent blisters

• To 'toughen up' soft skin on the fingertips when learning to play stringed instruments such as guitar or cello

• For the treatment and prevention of bed sores in patients who are bed-ridden. Surgical Spirit works by tightening, hardening and disinfecting the outer layer of skin

• For the treatment of minor cuts and abrasions where it acts as a disinfectant leaving the skin bacteria-free

Surgical spirits are useful in killing bacteria, viruses and fungus. They are able to cross the lipid layer of the bacteria cell wall, destroying the cell membrane and reaching the cell's interior components to destroy the organism. However, because they are unable to kill bacterial spores, surgical spirits are considered antiseptic but not sterilizing agents. For this reason, they are acceptable for household use and minor medical applications but not for more advanced procedures such as instrument cleaning. Surgical spirits may be used to clean cuts or as a household disinfectant. Surgical spirits are solutions of ethanol that are toxic and unfit for consumption because of the addition of methanol and other ingredients.

PROJECT COST ESTIMATE
CAPACITY

Surgical Methylated Spirit 1 Ltr Size Bottle	: 4,000.0 Nos. Per Day
Surgical Methylated Spirit 5 Ltr Size Bottle	: 480.0 Nos. Per Day
Surgical Methylated Spirit 20 Ltrs. Size Cans	: 80.0 Nos. Per Day
Plant & Machinery	: ₹ 79 Lakhs
Cost of Project	: ₹ 265 Lakhs
Rate of Return	: 27.53%
Break Even Point	: 54.72%

Set up an E-Waste Recycling Plant Waste Electrical & Electronic Equipment (WEEE)

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. Electronic Waste – or e-waste – is the term used to describe old, end-of-life electronic appliances such as computers, laptops, TVs, DVD players, mobile phones, mp3 players etc. The perception of e-waste is often restricted to a narrower sense, comprising mainly of end-of-life information- & telecommunication equipment and consumer electronics. However, technically, electronic waste is only a subset of WEEE (Waste Electrical and Electronic Equipment).

The global e-waste management market size was valued at $49,880 million in 2020, and is projected to reach $143,870 million by 2028, registering a CAGR of 14.3% from 2021 to 2028. Ever increasing demand and scarcity of rare metals has been leading to rapid rise in prices of these metals. Such metals need to be recovered from e-waste for reuse in another production. For instance, in one million mobile phones in e-waste, there is around 250 kg of silver, 24 kg of gold, and nine tons of copper that can be recovered. This also benefits manufacturers to produce electronic devices with lower cost and gain cost advantages over competitors.

PROJECT COST ESTIMATE
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	: 27.47%
Break Even Point	: 60.15%

Paprika Oleoresin

Paprika oleoresin (also known as paprika extract and oleoresin paprika) is an oil-soluble extract from the fruits of Capsicum annuum or Capsicum frutescens, and is primarily used as a colouring and/or flavouring in food products. It is composed of vegetable oil (often in the range of 97% to 98%), capsaicin, the main flavouring compound giving pungency in higher concentrations, and capsanthin and capsorubin, the main colouring compounds (among other carotenoids).

Helps in Healing Wounds: Since it contains a good proportion of Vitamin E, paprika oleoresin helps the body in producing red blood cells. It also helps in rapid wound healing.

Treats Skin Problems: Paprika oleresin is loaded with antibacterial properties that make it effective against any skin problem associated with bacterial infection, including acne.

Supports Healthy Digestion: Paprika oleoresin may also promote healthy digestion by increasing saliva and stomach acids, which help in breaking down food and making nutrients available for energy.

Oleoresins can be defined as natural resinous plant extractions. They are also referred to as aromatic liquid preparations made out of the combination of botanical matter extraction and solvents (i.e. resin + essential oils). The non-volatile components present in Oleoresins characterize the color, flavor and the other aspects of the raw material.

PROJECT COST ESTIMATE

CAPACITY

Paprika Oleoresin	: 160.0 Kgs Per Day
Paprika Spent	: 1,093.3 Kgs Per Day
Plant & Machinery	: ₹ 395 Lakhs
Cost of Project	: ₹ 1700 Lakhs
Rate of Return	: 29.32%
Break Even Point	: 57.23%

The global oleoresins market is estimated to be valued at USD 1.2 billion in 2019 and is projected to reach USD 1.7 billion by 2025, recording a CAGR of 6.0% from 2019 to 2025. Oleoresins are botanical extracts of essential oils and resin constituents. They form the flavor and aromatic profile of the plant from which they are extracted. Oleoresins are volatile or non-volatile compounds obtained from spices using solvents.

Lucrative Business of Ethanol as Bio-Fuel

Biofuels are transportation fuels such as ethanol and biomass-based diesel fuel that are made from biomass materials. These fuels are usually blended with petroleum fuels (gasoline and distillate/diesel fuel and heating oil), but they can also be used on their own. Using ethanol reduces the consumption of gasoline and diesel fuel made from crude oil, which can reduce the amount of crude oil imported from other countries.

Ethanol is used extensively as a solvent in the manufacture of varnishes and perfumes; as a preservative for biological specimens; in the preparation of essences and flavorings; in many medicines and drugs; as a disinfectant and in tinctures (e.g., tincture of iodine); as a fuel and gasoline additive. Ethanol has been produced from different sources in the past.

Properties of Ethanol

• It is 10th % pure ethyl alcohol.

• It is highly flammable, non-toxic sweet smelling compound

• Ethanol has a greater affinity for water

• Highly Soluble

• Ethanol has an auto-ignition temperature of 793°F

• Some ethanol blends can conduct electricity

The global fuel ethanol market was valued at USD 78.6 billion in 2018 and expected to grow at a CAGR of 5.8% in, 2019–2025. Crude oil and natural gases are commonly used sources for manufacturing fuels across the world. As India has very large area under sugar cultivation, we can also follow the Brazilian route (i.e. using ethanol as motor fuel) of ethanol production. Biofuel refers to the specific type of fuel derived from the natural sources such as plants, organic materials, animal wastes. Biofuel industry is gaining substantial attraction as alternative fuel for the petroleum derived fuels in order to mitigate major concerns of global warming, raised due to the fossil fuels. The market is mostly driven by rising environmental concerns and the need to reduce GHG emissions.

Government has been promoting use of ethanol as a blend stock with main automotive fuel like petrol in line with the National Policy on Biofuels -2018 under the Ethanol Blended Petrol (EBP) Programme. This policy envisages an indicative target of blending 20% ethanol in petrol by 2030. Department of Food & Public Distribution (DFPD) has informed that the production of ethanol varies from distillery to distillery and depends upon various factors viz. cost of raw material, conversion cost, efficiency of distillery plants etc. Several supply and demand side interventions have been initiated by the Government including enhancing scope of raw material for ethanol production and fixing remunerative prices of ethanol from different feedstocks being utilized for ethanol production.

PROJECT COST ESTIMATE

CAPACITY

Ethanol	: 30.0 KL Per Day
Plant & Machinery	: ₹ 345 Lakhs
Cost of Project	: ₹ 4325 Lakhs
Rate of Return	: 24.00%
Break Even Point	: 48.48%

Production of Sugar from Sugar Beet

Sugar is the generic name for sweet-tasting, soluble carbohydrates, many of which are used in food. Table sugar, granulated sugar, or regular sugar, refers to sucrose, a disaccharide composed of glucose and fructose. Simple sugars, also called monosaccharides, include glucose, fructose, and galactose. Compound sugars, also called disaccharides or double sugars, are molecules composed of two monosaccharides joined by a glycosidic bond. Common examples are sucrose.

PROJECT COST ESTIMATE

CAPACITY

Sugar from Sugar Beet	: 360.0 MT Per Day
Plant & Machinery	: ₹ 3679 Lakhs
Cost of Project	: ₹ 6910 Lakhs
Rate of Return	: 29.56%
Break Even Point	: 61.68%

Sucrose is used in prepared foods (e.g. cookies and cakes), is sometimes added to commercially available processed food and beverages, and may be used by people as a sweetener for foods (e.g. toast and cereal) and beverages (e.g. coffee and tea).

White granulated sugar are 97% to nearly 100% carbohydrates, respectively, with less than 2% water, and no dietary fiber, protein or fat (table). Brown sugar contains a moderate amount of iron (15% of the Reference Daily Intake in a 100 gram amount, see table), but a typical serving of 4 grams (one teaspoon), would provide 15 calories and a negligible amount of iron or any other nutrient. Because brown sugar contains 5–10% molasses reintroduced during processing, its value to some consumers is a richer flavor than white sugar.

The global sugar market attained a consumption volume of about 175 million tons in 2020. The market is expected to grow at CAGR of 1% in the period of 2021-2026 to reach a volume of 186 million tons by 2026. Sugar refers to a sweet crystalline substance which is prepared from sugar cane and sugar beet. It is used across the globe for innumerable food and non-food applications. In addition to offering a sweet taste, sugar performs a variety of other functions in the food industry.

Production of Artemisinin from Artemisia Annua Plant

Artemisia annua belongs to the plant family of Asteraceae and is an annual short-day plant. Its stem is erect brownish or violet brown. The plant itself is hairless and naturally grows from 30 to 100 cm tall,

although in cultivation it is possible for plants to reach a height of 200 cm.

Artemisinin is an ancient Chinese herbal therapy for malarial fevers which has been recently found to have potent activity against many forms of malarial organisms, including chloroquine-resistant Plasmodium falciparum. Artemisinin is a sesquiterpene lactone obtained from sweet wormwood, Artemisia annua, which is used as an ant malarial for the treatment of multi-drug resistant strains of falciparum malaria. It has a role as an antimalarial and a plant metabolite. It is a sesquiterpene lactone and an organic peroxide. Artemisinin has been used in trials studying the treatment of Schizophrenia, Malaria, Falciparum, and Plasmodium Falciparum. Artemisinin has been used in trials studying the treatment of Schizophrenia, Malaria, Falciparum, and Plasmodium Falciparum.

The Artemisinin Derivatives market was valued at USD 655 million in 2020 and expected to grow at a CAGR of 6.05% during the period from 2021 to 2027 to reach around USD 1,080 million in 2027. Artemisinin derivatives are a group of active pharmaceutical ingredients which are used in treatment against malaria. Artemisinin and its derivatives effectively fight against malarial and parasitic worm (helminth) infections. They have been proven to be most effective and potential drugs to kill the parasites and its life cycle. Artemisinin is typically derived from the plant Artemisia annua and sweet wormwood. Artemisia annua and sweet wormwood are long been used in traditional Chinese medicines.

PROJECT COST ESTIMATE

CAPACITY

Artemisinin (10 ml Size Pack)	: 3,000.0 Bottles Per Day
Plant & Machinery	: ₹ 134 Lakhs
Cost of Project	: ₹ 574 Lakhs
Rate of Return	: 31.00%
Break Even Point	: 70.80%

Investment Opportunities in Business of PET Recycling & Production of Flakes

Municipal solid waste (MSW) is the garbage that people produce in their homes and where they work which is operated and controlled by local officials such as city or governments. Plastic consumption has grown at a tremendous rate over the past two decades as plastics now play an important role in all aspects of modern lifestyle. Plastic recycling refers to a process in which the discarded plastic is converted into reusable form. Discarded plastic can be rigid such as bottles, and containers; or non-rigid such as films, and wrappers.

Plastic recycling refers to a process in which the discarded plastic is converted into reusable form. Discarded plastic can be rigid such as bottles, and containers; or non-rigid such as films, and wrappers. Plastic recycling market is segmented on resin type such as PET. Polyethylene terephthalate abbreviated PET, is the most common thermoplastic polymer resin of the polyester family and are used in fibers for clothing, containers for liquids and foods, and thermoforming for manufacturing.

PROJECT COST ESTIMATE

CAPACITY

Recycled PET Flakes	: 64.0 MT Per Day
Plant & Machinery	: ₹ 174 Lakhs
Cost of Project	: ₹ 440 Lakhs
Rate of Return	: 30.45%
Break Even Point	: 71.77%

Polyethylene terephthalate or PET (also known as PETE) is one of the most common types of plastic. Most single-serve plastic bottles, including those for water, soft drinks and juices, are made with PET. PET is the main constituent in a variety of consumer and industrial products including plastic fibers, videotape, audiotape, film, engineered resin, food containers. PET-bottles contribute increasingly to the generation of waste and litter especially in developing countries.

The global recycled polyethylene terephthalate market size was valued at USD 8.56 billion in 2020 and is expected to grow at a compound annual growth rate (CAGR) of 6.7% from 2021 to 2028. The market growth is primarily driven by changing consumer behavior towards sustainability. Asia Pacific was the largest regional market in 2020, which accounted for a revenue share of over 45. The regional market is characterized by the easy availability of land along with a low-cost, skilled labor force.

Start Assembling of Lithium Ion Battery *(Battery Assembly)*

Lithium batteries are now powering a wide range of electrical and electronical devices, including laptop computers, mobile phones, power tools, telecommunication systems and new generations of electric cars and vehicles. Lithium metal batteries and lithium ion batteries.

• Lighter Design: Li-ion batteries are lighter as compared to other rechargeable batteries considering the battery capacity and are thus used in portable consumer electronic devices where weight and form factor are the important selling points.

• Low Self-discharge and Longer Shelf Life: Li-ion battery has lower self-discharge rate as compared to other rechargeable batteries, about 1.5 percent per month which enables longer shelf life when not in use as it discharges slowly than other rechargeable batteries.

• Quick Charging: Lithium-ion batteries take lesser time to charge as compared to other rechargeable batteries like lead acid, nickel-metal hydride, and nickel- cadmium.

PROJECT COST ESTIMATE

CAPACITY

48 Volt, 60 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
48 Volt, 80 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
48 Volt, 100 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
60 Volt, 20 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
60 Volt, 30 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
72 Volt, 20 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
72 Volt, 40 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
12.8 Volt, 8 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
12.8 Volt, 12 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
12.8 Volt, 20 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
12.8 Volt, 30 AH Lithium-Ion Battery Pack	: 5.0 Nos. Per Day
Plant & Machinery	: ₹ 72 Lakhs
Cost of Project	: ₹ 293 Lakhs
Rate of Return	: 29.95%
Break Even Point	: 70.65%

Lithium-ion (Li-ion) batteries, also known as secondary batteries, are rechargeable batteries in which lithium ions move from the negative electrode, usually made of carbon, to the positive electrode made of a metal oxide (nickel, manganese and cobalt) during discharge, and back when charging.

(1) The Li-ion batteries are used in cameras, calculators.

(2) They are used in cardiac pacemakers and other implantable device.

(3) They are used in telecommunication equipment, instruments, portable radios and TVs, pagers.

(4) They are used to operate laptop computers and mo-

bile phones and aerospace application.

The global Lithium Ion Battery Market is expected to grow from USD 40.5 billion in 2020 to USD 91.9 billion in 2026 with a compounded annual growth rate of 14.63%. Demand for electric vehicles is forecast at 19.1% CAGR over the period to 2026, with strong sales volume in developing countries. The US, China, Japan, India and other countries present strong potential for growth in batteries.

Manufacturing of Rubber Powder from Waste Tyres

Rubber is polymer of butadiene and one of the most important chemical ingredients, which is widely used in the different field of modern advance world. Rubber is specially used in the tyre Industry, which is used in the different type of vehicles. Rubber products require rubber as a raw material. Either natural rubber, which is often cultivated on large plantations – with all the problems associated with a monoculture or alternatively synthetic rubber, which is produced using crude oil. Both processes use a high amount of resources.

Waste tyres are a huge problem throughout the world. There is large number of tyres used in the vehicles and also change of the tyres also regularly happened. Old tyres, which cannot be repaired further, that can be used for another by product of the waste tyres. Rubber powder is one of the major byproduct of waste tyre recycling. Rubber powder has large number of use in the different section of the industry.

PROJECT COST ESTIMATE

CAPACITY

Rubber Powder	: 5.0 MT Per Day
By Product Steel Wire	: 1.4 MT Per Day
Plant & Machinery	: ₹ 46 Lakhs
Cost of Project	: ₹ 191 Lakhs
Rate of Return	: 26.98%
Break Even Point	: 61.44%

Waste tyre recycling technology is very cost effective and performs 100% wastage tyre recycling (No churn left after the process). In this process no chemical ingredients are used, therefore it is environment friendly. Raw material (wastage tyre) is cheap and easily available, Generate economically valuable products out of waste tyres and products have good market value and demand. Also each recycled ton of tyres preserves 10 tons of carbon dioxide (CO_2) that is a major greenhouse gas.

Properties

1. It is fine powder of size of 5 meshes to 200 meshes.
2. It is insoluble in water.
3. It does not react with alkali or normal acid.
4. Bulk density of rubber powder 0.85–0.90.

There is a rapid market increase of rubber powder in India. Demand of rubber powder in India is increased by 5%-8%. There is fair scope of this product. There is a difference between recycling and reclaiming. While recycling includes any form of reuse of waste rubber, reclaim involves de-polymerisation. In recycling, the vulcanised rubber is ground either by cryogenic or ambient grinding process. In reclaim the ground rubber is treated with heat and chemicals.

Start Manufacturing of Activated Charcoal from Bamboo

Activated charcoal is a non-graphite form of charcoal and is micro crystalline in nature. It is extensively used in various industries as a very good adsorbent for odour or colour. There are two varieties of activated charcoal viz gas phase or the liquid phase adsorbents. The liquid phase activated charcoal is usually powder or granular form whereas the gas phase adsorbent is hard granules like dust free pellets. The term activated charcoal or active charcoal is usually applied to amorphous charcoal possessing higher adsorption capacity their wood or animal charcoal.

Bamboo Charcoal is obtained from fragments of a bamboo botanical that is collected after it has grown for five years or more. Bamboo Charcoal undergoes the same process of Pyrolysis in order to become "activated." Bamboo Charcoal can be categorized as either Raw Bamboo Charcoal or Bamboo Briquette Charcoal. Bamboo can be converted into charcoal and activated charcoal via carbonisation followed by activation. The carbonisation process is to enrich the carbon content and create an initial porosity, and the activation process helps in enhancing the pore structure. Carbonisation takes place in the temperature range of 300–400°C.

PROJECT COST ESTIMATE

CAPACITY

Activated Charcoal Powder	: 4.0 MT Per Day
Plant & Machinery	: ₹ 185 Lakhs
Cost of Project	: ₹ 787 Lakhs
Rate of Return	: 27.32%
Break Even Point	: 54.89%

1. Removing or improving the colour and flavour of edible materials, such as agar agar, beer, cider, wines whisky, vinegar, fruit juices, gelatin, pectin, and cocoa butter.
2. Removing colour, odour grease and colloids from dry cleaning fluids such as naptha, gasoline, carbon tetrachloride, etc.
3. Dephenolizing effluent gas works liquor.
4. Removing oil and grease from boiler feed water and electroplating solutions.
5. Recovering iodine from sea water, and bromine from brines.

The global activated carbon market is projected to reach USD 8.12 billion by 2021 at a CAGR of 9.4% while in terms of volume the overall market is projected to grow at a CAGR of 8.4% and reach 3,857.9 KT by 2021 led by powdered activated carbon. The growing use of activated carbon in industrial applications has led to an increase in its share in the gaseous phase applications, which is expected to drive the activated carbon market in the Asia-Pacific region. Moreover, the growing use of activated carbon for soil remediation applications, as well as in pharmaceutical applications have witnessed high growth during the last five years, and is further expected to boost the growth of the activated carbon market. However, the scarcity of raw material, especially in the Asia-Pacific region is a major factor restraining the growth of the activated carbon market globally.

Production of Bromelain Enzyme from Pineapple Stems

Bromelain enzyme is the collective term for enzymes, principally proteolytic enzymes, derived from the ripe and unripe fruit, as well as the stem and leaves of the pineapple plant. Commercial bromelain is typically stem bromelain. Bromelain is mainly comprised of cysteine proteases, with smaller amounts of acid phosphatase, peroxidase, amylase and cellulase. Bromelain contains at least four distinct. Bromelain is a chief protease enzymes found in pineapple plant (Ananas comosus). Pineapples are consumed or served fresh, cooked, juiced and can be preserved. This fruit is highly perishable and seasonal.

Bromelain is abundant in stem and fruit of pineapple plant and it can also be isolated in small amount from pineapple waste such as core, leaves, peel etc. Pineapple plant also contains minor quantities of other proteinases like ananain and comosain but bromelain is regarded as a primary and extensively investigated component. The reason of being such valuable is due to its miraculous utilization as

phytomedical compound.

1. Bromelain when added to dough during baking hydrolyses the gluten and softens the dough.It also improves the quality and taste of biscuits and bread.

2. Bromelain is used in the dairy industry for casein condensation during cheese making

3. Bromelain is used in the meat industry for meat tenderizing

4. Bromelain is used in the cosmetics industry due to its property of skin rejuvenation and whitening

PROJECT COST ESTIMATE
CAPACITY

Bromelain Enzyme	: 3.0 MT Per Day
Plant & Machinery	: ₹ 92 Lakhs
Cost of Project	: ₹ 285 Lakhs
Rate of Return	: 33.25%
Break Even Point	: 82.73%

The global bromelain market size was valued at USD 37.6 million in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 7.2% from 2020 to 2027. The use of bromelain in the healthcare sector is expected to witness substantial growth during the period because of rising R&D activities to enhance the product applications in the treatment of cancer, HIV aids, and inflammatory diseases like asthma, coeliacdisease, hepatitis, glomerulonephritis, and autoimmune diseases.

Start extraction of Cashew Nut Shell Oil and Cardanol

Cashew (Botanical name AnacardiumOccidentale) was introduced in India by the Portuguese four centuries ago mainly to prevent soil erosion. Cashew ranks second among the nine tree nuts which figure prominently in international trade circles, first being Almond.

Cardanol is a phenol obtained from anacardic acid, the main component of cashew nutshell liquid (CNSL), a by-product of cashew nut processing. Cardanol finds use in the chemical industry in resins, coatings, frictional materials, and surfactants used as pigment dispersants for water-based inks. Distillation of CNSL under reduced pressure gives cardanol. The residue will be rich in cardanol and is generally known as residol, which is conveniently used in the preparation of friction dust for brake linings, and also in rubber compounding formulations.

The cashewnut shell liquid is an important raw material for a number of polymer based industries like paints and varnishes, resins, industrial and decorative laminates, brake linings and rubber compounding resins. There are many medicinal uses of cashew apple and its juice. It is a good remedy for survey, cough and cold and is considered an excellent purgative. The wood of cashew nut is used for firewood and charcoal making. Its wood pulp is used to fabricate corrugated and hard board boxes. The cashew nut shell is having a soft feathery outer skin and a thin hard inner skin. Between these skins is the honeycomb structure containing the phenolic material known as Cashew Nut Shell Liquid and is generally abbreviated as CNSL.That the cashew nut consists of kernel, shell and testa and on an average distribution is 20 to 25% kernel, 60-70% cashew nut shell and 2-5% testa.

PROJECT COST ESTIMATE
CAPACITY

Cashew Nut Shell Oil	: 11.0 MT Per Day
Cardanol	: 5.5 MT Per Day
De-Oiled Cashew Nut Shell Cake (bye Product)	: 78.0 MT Per Day
Plant & Machinery	: ₹ 323 Lakhs
Cost of Project	: ₹ 752 Lakhs
Rate of Return	: 26.72%
Break Even Point	: 52.53%

Cashew nut shell Liquid (CNSL) is an important industries raw material for resin manufacture and the shells can be burned to provide heat for the decorticating operations. The liquid contained within the shell casing of the cashew, known as Cashew Nut Shell Liquid (CNSL) has a variety of industrial uses.

Lucrative Business of HDPE Jumbo Bags (Flexible Intermediate Bulk Containers) FIBCS

Jumbo bags are big bags used for packing bulk materials of different types. These big bags in different specifications and grades based on the requirements of our customers and packaging needs. The jumbo fabrics are made from polypropylene materials that are high durable and flexible for supporting a wide range of packaging applications. Jumbo bags are big bags used for packing bulk materials of different types. These big bags are manufactured in different specifications and grades based on the requirements of our customers and packaging needs.

PROJECT COST ESTIMATE
CAPACITY

HDPE Jumbo Bags (FIBCS)	: 6,666.7 Nos Per Day
Plant & Machinery	: ₹ 3465 Lakhs
Cost of Project	: ₹ 3800 Lakhs
Rate of Return	: 26.27%
Break Even Point	: 36.20%

Jumbo bags are big bags used for packing bulk materials of different types. These big bags are manufactured in different specifications and grades based on the requirements of our customers and packaging needs. The jumbo fabrics are made from polypropylene materials that are high durable and flexible for supporting a wide range of packaging applications.

- Easy lifting due to integral lifting loops
- Cost effective
- Very strong and flexible
- Variety of dimensions available
- Variety of filling, discharging and lifting facilities
- FIBCs are easy to transport. With a wide variety of Lifting Options available these bags can be transported in a very easy and simple way.
- FIBCs are in several standards and specifications and are renowned for long lasting & its durablality.
- FIBCs are the easiest way to transport and move bulk materials used for Exports.

The global bulk bags market is expected to touch a valuation of approximately USD 4956.7 million by 2023, growing at a 6.80% CAGR. The market calls for reusable, recyclable, and contamination-free packaging solutions to replace wood and cardboard. The need to prevent damage and contamination to FIBC loads, which customers stressed as a great need, encourages bulk bag manufacturers to develop new solutions in large part.

Emerging Business of Xanthan Gum (Food and Oil Drilling Grade)

Xanthan gum is a popular food additive that's commonly added to foods as a thickener or stabilizer. It's created when sugar is fermented by a type of bacteria called Xanthomonascampestris. When sugar is fermented, it creates a broth or goo-like substance, which is made solid by adding an alcohol. It is then dried and turned into a powder. Xanthan gum is a substance used in making some foods and medications. It has different effects in these products.

It can add thickness, keep textures from changing, and hold ingredients in place.

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 can be produced from different simple sugars using a fermentation process, and derives its name from the strain of bacteria used, Xanthomonascampestris.

Xanthan gum also helps thicken commercial egg substitutes made from egg whites, to replace the fat and emulsifiers found in yolks. It is also a preferred method of thickening liquids for those with swallowing disorders, since it does not change the color or flavor of foods or beverages at typical use levels. It is a heavily used gum for the industrial uses in the food industry. Its thickening and binding qualities make it a very useful cooking aid food additive in bakery products and dairy uses. Xanthan gum is a substance used in making some foods and medications. It has different effects in these products. It can add thickness, keep textures from changing, and hold ingredients in place.

Xanthan gum market size exceeded USD 960 million, in 2019 and is estimated to grow at over 6% CAGR between 2020 and 2026. Increasing prevalence of gluten intolerance and rapid penetration of healthy snacks in food & beverage industry to augment product demand increasing competition in food & beverage sector and rapid shift towards gluten free snacks is likely to boost product demand. Furthermore, changing consumer perceptions on health & nutrition and increasing need for easily digestible solutions may also provide an impetus to xanthan gum market demand.

PROJECT COST ESTIMATE

CAPACITY

Xanthan Gum Food Grade	: 720.0 Kg. Per Day
Xanthan Gum Oil Drilling Grade	: 340.0 Kg. Per Day
Plant & Machinery	: ₹ 120 Lakhs
Cost of Project	: ₹ 555 Lakhs
Rate of Return	: 25.27%
Break Even Point	: 61.77%

Setup a Manufacturing Plant of Disposable Plastic Syringes with Needles

Disposable Syringes are made of plastic material and are used in the field of medical and veterinary science. Due to their availability in sterilized condition, ready to use, and cost effectiveness, disposable syringes are fast replacing the age-old glass syringes. The constantly increasing use of this type Syringe indicates its importance which is based mainly on the advantages it offers regarding cost and hygienic applications. The manufacture of plastic syringes has been developed to such a degree that the products now satisfy the requirements and standards set by Hospital and physicians. At the same time they offer the best possible technique of application to the physician and the highest possible degree of safety to the patient.

Disposable Syringes are being used by doctors to inject medicines through intravenous or intramuscular ways for the treatment of diseases & also by research & development personnel. Disposable syringes are made of plastic material and are used in the field of medical and veterinary science. Due to their availability in sterilized condition, ready to use, and cost effectiveness, disposable syringes are fast replacing the age-old glass syringes.

Medical-grade disposable hypodermic syringes are often used in research laboratories for convenience and low cost. Another application is to use the needle tip to add liquids to very confined spaces, such as washing out some scientific apparatus. They are often used for measuring and transferring solvents and reagents where a high precision is not required. Alternatively, microliter syringes can be used to measure and dose chemicals very precisely by using a small diameter capillary as the syringe barrel.

Disposable Syringes Market is valued at USD 7.29 Billion in 2018 and expected to reach USD 11.08 Billion by 2025 with the CAGR of 6.19% Increasing prevalence of many chronic diseases that necessitate the use of disposable syringes in their care is expected to drive the Global Disposable Syringes Market. Furthermore, numerous government agencies are funding companies that produce disposable syringes for the care of chronic disease such as Diabetes, which predominate the global disease burden.

PROJECT COST ESTIMATE

CAPACITY

Disposable Plastic Syringes with Needles 1 ml Size each Packed in Polypack	: 50,000.0 Nos. Per Day
Disposable Plastic Syringes with Needles 3 ml Size each Packed in Polypack	: 50,000.0 Nos. Per Day
Disposable Plastic Syringes with Needles 5 ml Size each Packed in Polypack	: 50,000.0 Nos. Per Day
Disposable Plastic Syringes with Needles 10 ml Size each Packed in Polypack	: 50,000.0 Nos. Per Day
Plant & Machinery	: ₹ 524 Lakhs
Cost of Project	: ₹ 345 Lakhs
Rate of Return	: 30.78%
Break Even Point	: 35.60%

Profitable Opportunities in Business of Turkey Red Oil

Turkey Red Oil which are also known as sulphonated castor oil in the trade, is the oldest textile finishing agent. One of such products derived by the use of castor oil is Turkey Red Oil. It is also popularly known as Sulfated Castor Oil. This oil is widely appreciated in the market for its capacity to easily disperse in water, its long life shelf and its purity. Turkey red Oil is essentially an intimate mixture of pigments, oil varnishes, driers, and frequently waxy or greasy compounds.

Turkey Red Oil is used as an emulsifier for bath oils and as a humectant in cosmetics. Other than these, it is also used in the textile industry and sugar industries as a defoaming agent and also as an emulsifier.

PROJECT COST ESTIMATE

CAPACITY

Turkey Red Oil	: 4,000.0 Kgs Per Day
Plant & Machinery	: ₹ 36 Lakhs
Cost of Project	: ₹ 164 Lakhs
Rate of Return	: 26.77%
Break Even Point	: 66.49%

• In textiles, as surfactants and wetting agents, in paper industry for defoaming, in cosmetics as emulsifiers, in pharmaceuticals industry as undecylenate, in paints inks and as lubricants.

• For the soap-making industry that wishes to manufacture transparent soaps, this Turkey Red Oil or sulfonated castor oil helps in superfatting liquid soap.

• This oil also helps to emulsify essential oils so that they can dissolve in other water-based products.

• It is the only oil that will completely disperse in water. It is a surfactant and therefore makes a wonderful base for bath oil as it mixes well with water, producing a milk bath.

• Sulfonated castor oil is also used in agriculture as organic manure, in paper industry for defoaming, in pharmaceuticals as undecylenate, in paints, inks, softeners and in lubricants.

The global Sulphonated Castor Oil market was valued at USD million in 2019 and it is expected to reach USD million by the end of 2026, growing at a CAGR of during

2021-2026. The global sulfated castor oil market is at a dynamic evolution stage owing to the shift industries from petrochemical resources. The rising shift of consumers towards bio-based chemicals which is attributed to the fluctuating prices of petrochemicals and rising demand of sustainable and bio-degradable plant-based chemical products is driving the growth of global sulfated castor oil market.

Synthetic Camphor

Camphor is a waxy, flammable, white or transparent solid with a strong aroma. It is a terpenoid with the chemical formula C10H16O. It is found in the wood of the camphor laurel (Cinnamomumcamphora), a large evergreen tree found in Asia and also of the unrelated kapur tree, a tall timber tree from the same region. This port traded in camphor extracted from laurel trees (Cinnamonum camphora) that were abundant in the region. Even now, the local tribespeople and Indonesians in general refer to aromatic naphthalene balls and moth balls as kapur Barus.

Camphor can be produced from alpha-pinene, which is abundant in the oils of coniferous trees and can be distilled from turpentine produced as a side product of chemical pulping. With acetic acid as the solvent and with catalysis by a strong acid, alpha-pinene readily rearranges into camphene, which in turn undergoes Wagner-Meerwein rearrangement into the isobornylcation, which is captured by acetate to give isobornyl acetate.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 2,500 MT Per Annum
Plant & Machinery	: ₹ 359 Lakhs
Cost of Project	: ₹ 1192 Lakhs
Rate of Return	: 28%
Break Even Point	: 51%

The global market for synthetic camphor is estimated to be valued at US$ 322.3 Mn by the end of 2018 and is expected to reach a market value of US$ 571.6 Mn by the end of 2028, expanding at a CAGR of 5.9% over the forecast period. The global market is anticipated to represent incremental opportunity worth US$ 249.3 Mn between 2018 and 2028. Synthetic camphor is used in production of insecticides such as moth repellants and mosquito repellants. With the rising awareness around the air purifying properties of synthetic camphor, the demand for synthetic camphor powder has seen an upsurge from the downstream producers of synthetic camphor tablets.

Synthetic camphor is conventionally prepared from the extracts of the camphor tree. While the one produced using chemical synthesis is known as synthetic camphor. One of the most important raw material employed in the manufacturing of synthetic camphor is turpentine oil. Synthetic camphor involves two grades of products solely differentiated in the terms of its purity.

E-Rickshaw Assembling

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, and is often argued to be much better than other rickshaws as they are considered almost pollution free. Such vehicle is constructed or adapted to carry not more than four passengers, excluding the driver, and not more than forty kilograms luggage in total.

PROJECT COST ESTIMATE
CAPACITY

E Rickshaw	: 4 Nos./Day
Plant & Machinery	: ₹ 28 Lakhs
Cost of Project	: ₹ 323 Lakhs
Rate of Return	: 24%
Break Even Point	: 56%

The Indian automobile industry is one of the largest growing markets of the world, and contributes highly in the country's manufacturing facilities. Not only this, the automotive industry in India is further expected to pull up the share of manufacturing in India's GDP to 25% by 2022 from 15% currently, with production of Electric Vehicles being new talk of the town. Entrepreneurs who invest in this project will be successful.

Roller Flour Mill

Roller Flour Mills involved in commercial milling operations and unorganized sector consisting of mainly Chakkis. Around 800 large Flour Mills in the country convert about 10.5 Million Tons of wheat into wheat products i.e., Coarse Flour, Flour, Semolina, Bran & Wheat Germ. The flour milling industry is the main consumer of wheat and rye because these grains are the key cereals used for bread production. Maize, oat, barley and rice are used in flour production.

PROJECT COST ESTIMATE
CAPACITY

Maida	: 10500 MT/Annum
Sooji	: 2520 MT/Annum
Wheat Flour	: 4200 MT/Annum
Wheat Bran	: 3780 MT/Annum
Plant & Machinery	: ₹ 154 Lakhs
Cost of Project	: ₹ 538 Lakhs
Rate of Return	: 29%
Break Even Point	: 56%

The market size of packaged wheat flour will touch Rs 15,500 crore mark by 2020, double of its current market size of Rs 7,500 crore. The packaged wheat flour market in India is growing at a Compound Annual Growth Rate of almost 19 per cent since past three years. Entrepreneurs who invest in this project will be successful.

Ayurvedic Herbal Hand Sanitizer

Herbal hand sanitizer was prepared using leaves extracts of Ocimum sanctum, Eugenia caryophyllus and Cymbopogon flexuous. The antibiotic sensitivity test of the prepared herbal hand sanitizer against skin pathogens was checked using disc diffusion method and results were compared with commercially available synthetic hand sanitizer. The herbal hand sanitizer gives larger inhibition zone than the commercially available synthetic hand sanitizer against Staphylococcus aureus and Pseudomonas aeruginosa. The efficacy of herbal hand sanitizer was evaluated using microorganism suspensions; which revealed that the herbal hand sanitizer is efficient in reducing higher number of microorganism from the hands as compared to commercial synthetic hand sanitizer. Thus, owing to higher antimicrobial activity and efficacy these herbal extracts can be used in the preparation of herbal hand sanitizers on commercial scale.

In the absence of a vaccine or effective antiviral drugs, hand hygiene is a mainstay of efforts to prevent the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19.

The sanitiser contains natural extracted oils, which increase the antiseptic properties and act against bacterial contamination. It also provides cooling and natural fragrance along with moisturizing the skin upon use.

India hand sanitizer market is projected to surpass $ 43 million by 2025. Growth of hand sanitizer market in India can be attributed to rising awareness about healthy lifestyle & wellness, shifting consumer preference towards convenient hygiene products and rising disposable income. Moreover, the strong marketing activities by leading brands, in addition to huge endorsements, are some other drivers of hand sanitizer market in India. Moreover, the COVID-19 outbreak has boosted demand for sanitizers like never before across the diverse end user segments.

Hand Sanitizer : Hand sanitizer is alcohol-based or al-

cohol-free liquid, which is used for cleaning the hands to maintain the personal hygiene and to decrease the risk of infectious disease by killing germs present on the hands. It typically came in the liquid, gel or in foam form and recommended to use when soap and water is not available to wash the hands. Hand sanitizers are now being used on a daily basis in the schools, hospitals, supermarkets, and public places to disinfect the hands and to kill the germs. The alcohol-based hand sanitizers contain 605 to 95% alcohols to kill the bacteria and viruses present on the hand.

PROJECT COST ESTIMATE
CAPACITY

Hand Sanitizer (50 ml size Bottles)	: 10,000 Bottle Per Day
Plant & Machinery	: ₹ 16 Lakhs
Cost of Project	: ₹ 157 Lakhs
Rate of Return	: 31%
Break Even Point	: 62%

The hand sanitizer production line has hand sanitizer mixer, mixing preparation pot, working platform, control panels and essential pipes, valves and filters.

Hand Sanitizer Market size is projected to cross $2 billion by 2025, growing at a CAGR of 7.8% during the forecast period 2020-2025. Hand Sanitizer is an antiseptic disinfectant available in the form of a liquid, gel, foam and many others. It is said to be more effective than soaps due to its ability to eliminate most microorganisms. Public awareness campaigns by global health authorities such as the WHO (World Health Organization) also play a significant role in promoting the use of hand sanitizers. Increasing consumer awareness about hygiene coupled with such government initiatives are driving the hand sanitizer market.

Moringa Leaf Tablets

Moringa is grown in home gardens in West Bengal and Odisha and as living fences in southern India and Thailand, where it is commonly sold in local markets. In the Philippines and Indonesia, it is commonly grown for its leaves which are used as food. Moringa is also actively cultivated by the World Vegetable Center in Taiwan, a center for vegetable research. In Haiti, it is grown as windbreaks and to help reduce soil erosion. More generally, moringa grows in the wild or is cultivated in Central America and the Caribbean, northern countries of South America, Africa, Southeast Asia and various countries of Oceania.

The Global Moringa Products Market is expected to register a CAGR of 9.3% and reach USD 7902.9 Million by 2025. Moringa manufactured goods such as powders, oils, capsules, tablets, soaps, and seeds are acquired from separate parts of the moringa tree. The global moringa products market is projected to expand at a considerable rate over the last few years owing to the health advantages related with the products obtained from the tree. The ever-increasing use of moringa products is changing the number of moringa growers in the market. It is understood to have several advantages and it utilizes variety from health and attraction to helping prevent and cure illnesses.

PROJECT COST ESTIMATE
CAPACITY

Moringa Leaf Tablets (120 Tablets each Bottle)	: 500 Bottles / Day
Plant & Machinery	: Rs 20 lakhs
Cost of Project	: Rs 106 lakhs
Rate of Return	: 30%
Break Even Point	: 70%

Growing awareness regarding the medicinal benefits of moringa-based products is projected to propel industry growth. Moringa flowers, seeds, pods, leaves, gum, and bark have properties to relieve vitamin and mineral deficiencies, promote normal blood glucose levels, provide support for a healthy cardiovascular system, body's anti-inflammatory mechanisms, and immune system, and neutralize free radicals, andenrichanaemic blood. They have potential benefits to overcome malnutrition, lactating mothers, general weakness, depression, menopause, osteoporosis, and arthritis. As a whole any entrepreneur can venture in this project without risk and earn profit.

Indian Made Foreign Liquor

Indian made foreign liquor basically prepared from ethyl alcohol of different concentration with added flavour and coloured bottled hygienically. In India there are about 260 units engaged in the production of alcoholic brandy, whisky, beer & other beverages. The installed capacity of all those units is estimated of the order of 1400 to 1450 million liters per annum. India has been exporting alcohol in a substantial quantities. The estimated growth rate of demand is 20% per annum with increase in population and other industrial growth and consumption. There is good scope for new comers.

PROJECT COST ESTIMATE
CAPACITY

Plant Capacity	: 10,000 Btls/Day
Plant & Machinery	: ₹ 201.00 Lakhs
W. C. for 3 months	: ₹ 150.00 Lakhs
Total Cap. Investment	: ₹ 450.00 Lakhs
Rate of Return	: 50.93%
Break Even Point	: 44.86%

Worldwide production of country liquors rises steadi-

Paracetamol

Paracetamol, also known as acetaminophen or APAP, is a medication used to treat pain and fever. It is typically used for mild to moderate pain. It is often sold in combination with other ingredients such as in many cold medications. In combination with opioid pain medication, paracetamol is used for more severe pain such as cancer pain and after surgery. It is typically used either by mouth or rectally but is also available intravenously. Effects last between two and four hours.

Paracetamol lacks anti-inflammatory action in rheumatic disorders. However, it is less toxic than the Aspirin and does not produce anemia and liver damage, which sometimes result from the continued use of acetanilide and acetophenotidine. It is also an important intermediate in the manufacture of other pharmaceuticals like theantimalarialamodiaquine.

PROJECT COST ESTIMATE
CAPACITY

Paracetamol Tablets	: 1500 MT/Annum
Paracetamol Powder	: 420 Mt/Annum
Plant & Machinery	: ₹ 349 Lakhs
Cost of Project	: ₹ 863 Lakhs
Rate of Return	: 27%
Break Even Point	: 46%

The pharmaceutical industry in India ranks 3rd in the world terms of volume and 14th in terms of value. 20% of global exports in generics, making it the largest provider of generic medicines globally. USD 45 Billion in revenue by 2020, revenue of USD 55 billion by 2020 as base case, and can grow to USD 70 billion in a aggressive case scenario. USD 26.1 Billion in generics by 2016. USD 200 Billion to be spent on infrastructure by 2024.

Global pharma companies are increasingly exploring low cost option to outsource research and manufacturing, because of emerging slow-down in patented drug sales and high cost of R&D. Any entrepreneur venture into this field will be successful.

Battery Sprayer

A sprayer is a device used to spray a liquid, where sprayers are commonly used for projection of water, weed killers, crop performance materials,

pest maintenance chemicals, as well as manufacturing and production line ingredients. In agriculture, a sprayer is a piece of equipment that is used to apply herbicides, pesticides, and fertilizers on agricultural crops. Sprayer is a machine used to apply liquid chemicals on plants to control pest and diseases. It can also be used to apply herbicides to control weeds and to spray micro-nutrients to enhance plant growth.

A significant proportion of farmers in the country have already started moving from using animate sources to mechanical equipments to power their farming activities. Mechanical equipments for various farm operations like tillage, sowing, irrigation, plant protection and threshing, etc., are generally being used by the farming community. The Agricultural Sprayers Market can be segmented on the basis of type, component, power source, and application. Based on type, the market is segmented into low pressure sprayers and high-pressure sprayer. Low pressure sprayer is further segmented into tractor mounted, high clearance sprayer, trailer-mounted sprayers and truck mounted sprayers. Fuel-based sprayer are dominating the global agriculture spray market due to its raising demand owing to its large capacity. Solar sprayer is considered to be the fastest growing segment due to increasing demand for environmentally friendly agriculture sprayer across the globe.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 400 Pcs Per Day
Plant and Machinery	: ₹ 16 Lakhs
Cost of Project	: ₹ 110 Lakhs
Rate of Return	: 29%
Break Even Point	: 73%

Potato Powder

The protection of food stuffs from spoilage by moulds and bacteria is a major concern of the food technologist. Potatoes can be consumed in varied forms. In fact, it is a vegetable that can easily be combined with any other food item including other vegetables, cereals, pulses, meat and poultry.

Potato is one of the important tuber vegetable which is consumed throughout the year. The potato tubers vary in size, shape, colour, depth of eyes etc. which are important characteristics. In India potato is largely cultivated. So it is a good idea to make potato powder from raw potato. That's why we have to say that this is a good opportunity for a new entrepreneur.

PROJECT COST ESTIMATE
CAPACITY

Plant Capacity	: 500 Kgs./ Day
Plant & Machinery	: ₹ 7 Lakhs
Working Capital/Month	: ₹ 3.5 Lakhs
Total Capital Investment	: ₹ 19.60 Lakhs
Rate of Return	: 53%
Break Even Point	: 47%

Toughened Glass

Toughening is a process where the glass is heated at high temperatures to make it stronger and more resistant to breakage. This process creates a balance in the product's internal stresses, so that when the glass is broken, it would crumble into tiny granular chunks instead of breaking into sharp, jagged pieces. Toughened glass is a type of safety glass processed by controlled thermal or chemical treatments to increase its strength compared with normal glass.

The global glass market size was valued at USD 68.71 billion in 2014. It is expected to attain a CAGR of nearly 7.1% from 2015 to 2022. Increasing use of flat glass in photovoltaic modules, solar panels and e-glass owing to rising need for clean energy is anticipated to be one of the key trends escalating market growth. Toughened Glass Market size was over USD 24.5 billion in 2016 and industry expects consumption above 4.3 billion square meters by 2024.

Increasing demand for furniture including table tops, shelves and cabinets and other interior applications should stimulate toughened glass market size. Toughened glass market size from furniture applications should witness significant gains up to 2024 owing to increasing demand for innovative furniture designs for interior applications accompanied with improving lifestyle patterns of consumers. As a whole any entrepreneur can venture in this project without risk and earn profit.

PROJECT COST ESTIMATE
CAPACITY

Toughened Glass (Size of Sheet 8 ft. x 12 ft.)	: 4,000 Sq. Ft. / Day
Plant & Machinery	: ₹ 332 Lakhs
Cost of Project	: ₹ 939 Lakhs
Rate of Return	: 24%
Break Even Point	: 46%

Indian Kitchen Spices (Masala Powder) *Spices Powder and Blended Spices, Readymade Mixes (Red Chilli Powder, Sambhar Masala, Biryani Masala, Chicken Fry Masala, Garam Masala)*

The Indian spices market is worth INR 40,000 crore annually. Key spices produced in the country include pepper, cardamom, chilli, ginger, turmeric, coriander, cumin, celery, fennel, fenugreek, ajwain, dill seed, garlic, tamarind, clove, and nutmeg among others. The market is largely unorganized and the branded segment makes up about 15%.

The population in India is surging and the increasing consumer expenditure on food explains the swelling demand for food in India. Accordingly, the demand for spices is expected to grow in the future which will lead to a prominent growth in the revenues from the sales of spices in India. The revenues from India market are expected to expand to around USD 18 billion in FY'2020, growing with a CAGR of ~% from FY'2016 to FY'2020. The highest contribution to this growth is expected to come from the spice mixes and blended spices.

PROJECT COST ESTIMATE
CAPACITY

Red Chilli Powder	: 100 Kgs. / Day
Sambhar Masala	: 100 Kgs. / Day
Biryani Masala	: 100 Kgs. / Day
Chicken Fry Masala	: 100 Kgs/ Day
Garam Masala	: 100 Kgs. / Day
Plant& Machinery	: ₹ 35 Lakhs
Cost of Project	: ₹ 195 Lakhs
Rate of Return	: 29%
Break Even Point	: 53%

Microbrewery

Although the term "microbrewery" was originally used in relation to the size of breweries, it gradually came to reflect an alternative attitude and approach to brewing flexibility, adaptability, experimentation and customer service. The term and trend spread to the US in the 1980s and was eventually used as a designation of breweries that produce fewer than 15,000 U.S. beer barrels (1,800,000 liters; 460,000 U.S. gallons) annually. A microbrewery or craft brewery is a brewery that produces small amounts of beer (or sometimes root beer), typically much smaller than large-scale corporate breweries, and is independently owned. Such breweries are generally characterized by their emphasis on quality, flavour and brewing technique.

Beer is globally the third most popular drink after water

and tea. Growing at a CAGR of 2.4%, it is projected that the global beer market will reach approximately USD 636 billion by 2020. The Indian beer market is expected to grow and cross 430 billion by the end of 2017, as per the research of All India Brewers' Association (AIBA). Tapping brewed beer market at cost-effective rates, a variety of innovative startups have aplenty of ideas for diverse flavors, events and apps that could faciliate customers to indulge.

PROJECT COST ESTIMATE
CAPACITY

Microbrewery (650 ml Size Bottle)	: 1538 Nos. Per Day
Plant & Machinery	: ₹ 171 Lakhs
Cost of Project	: ₹ 397 Lakhs
Rate of Return	: 13%
Break Even Point	: 60%

The market for microbreweries is still developing. Today, only 4-5 states have established microbreweries that are essentially resto-bars where one can consume fresh-off-the-tap beer that has been brewed in-house. These microbreweries produce between 5,000 and 50,000 litres of beer, a day.

Rice Flakes and Puffed Rice

Rice flakes consumed by people of all ages and all times. With tea and coffee, rice flakes make a tasty and nutrition's snack. There is a definite need for the rice flakes industry to make inroads in the rural areas. Manufacturing of rice flakes products have substantial scope for development in smaller towns, village and backward areas and can provide a good number of employment opportunities at different levels. Rice is a major source of energy and an important source of protein. The availability of nutrients per 100 g of raw white rice provides 361 kcal and 6 g of protein. It also contains substantial amounts of zinc and niacin. On the other hand, it is low in calcium, iron, thiamine and riboflavin and has virtually no beta-carotene (Vitamin A). It is noteworthy that the highest the degree of polishing, the lowest the level of proteins, vitamins and minerals in the final product.

PROJECT COST ESTIMATE
CAPACITY

Puffed Rice (Muri)	: 20,000 Kgs / Day
Rice Flakes (Poha)	: 30,000 Kgs / Day
Broken Rice Flakes (Poha)	: 1,500 Kgs / Day
Rice Husk (bye product)	: 15,000 Kgs / Day
Plant & Machinery	: ₹ 120 Lakhs
Cost of Project	: ₹ 571 Lakhs
Rate of Return	: 28%
Break Even Point	: 57%

The global edible flakes market value was estimated at nearly 14.51 (USD Billion) in 2018 and is expected to be valued at 24.75 (USD Billion) by 2025 at a cumulative growth rate of around 8%. The report edible flakes market encompasses market estimation and analysis on both the global as well as regional level. The research report offers an extensive valuation of the market, business rivalry, opportunities, sales forecasts, revenue forecasts, and industry-validated market data. The report offers historical data from 2016 to 2018 and a forecast from 2019 to 2025 based on earnings (USD Billion). As a whole any entrepreneur can venture in this project without risk and earn profit.

Aluminium Foil Containers

The aluminum foil Packaging market was valued at USD 17.9 billion in 2019 and is expected to reach USD 46.19 billion by 2025, exhibiting a revenue-based CAGR of 4.0% over the forecast period.

The global aluminum foil containers market can be classified into thickness, foil type, application, and end-use. On the basis of thickness, the market is sectored into 0.007 mm–0.09 mm, 0.09 mm–0.2 mm, and 0.2 mm–0.4 mm. Based on the foil type, aluminum foil containers market Printed and Unprinted. Application wise, the market is sectored into food, beverages, pharmaceuticals, and personal care & cosmetics. Based on the end-user, the aluminum foil containers market is divided into Bags & Pouches, Wraps & Rolls, Blisters, Lids, Laminated Tubes, and Trays.

PROJECT COST ESTIMATE
CAPACITY

Aluminium Foil Containers 2 Cavity Mould (890 ml size)	: 172.8 Packets / Day (1000 Pcs/ Packet)
Aluminium Foil Containers 3 Cavity Mould (890 ml size)	: 259.2 Packets / Day (1000 Pcs/ Packet)
Plant & Machinery	: ₹ 60 Lakhs
Cost of Project	: ₹ 171 Lakhs
Rate of Return	: 34%
Break Even Point	: 79%

Natural Rubber Block

Natural rubber, also called by other names of India rubber, latex, Amazonian rubber, gaucho or caoutchouc, as initially produced, consists of polymers of the organic compound isoprene, with minor impurities of other organic compounds, plus water. Thailand and Indonesia are two of the leading rubber producers. Natural rubber is used extensively in many applications and products, either alone or in combination with other materials. In most of its useful forms, it has a large stretch ratio and high resilience, and is extremely waterproof Latex is the polymer cis-1,4-polyisoprene – with a molecular weight of 100,000 to 1,000,000 daltons.

Natural rubber is an elastomeric and a thermoplastic. Once the rubber is vulcanized, it is a thermos. Most rubber in everyday use is vulcanized to a point where it shares properties of both; i.e., if it is heated and cooled, it is degraded but not destroyed.

India's natural rubber imports in 2018/19 surged to a record high as production dropped amid a rise in consumption, the state-run Rubber Board said on May 3. The country's production fell 7.5 percent from a year ago to 642,000 tones, while consumption jumped 9 percent to a record 1.21 million tones, the board said.

The world production of rubber was considered to be very unstable during the last few years. Comparatively, India's production of rubber is consistent at the rate of 6% per annum. The Rubber industry in India is growing with its roots deeper. India is the 3rd largest consumer, while the largest producer of natural rubber in the world. The Rubber Board has received approval to encourage block rubber production, which is expected to mark a new channel for rubber processing in the domestic sector.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 24 MT Per Day
Plant & Machinery	: ₹ 402 Lakhs
Cost of Project	: ₹ 1211 Lakhs
Rate of Return	: 29%
Break Even Point	: 50%

Hydrated Lime Production *from Limestone*

The global hydrated lime market size will grow by 31.24 MMT during 2018-2022. In terms of value, the global lime market is anticipated to expand at a CAGR of ~ 6% and reach a value of US$ ~65.4 Bn by 2027.

Hydrated Lime is a caustic solid substance, white when

PROJECT COST ESTIMATE	
CAPACITY	
Hydrated Lime	: 120 MT / Day
Plant & Machinery	: ₹ 181 Lakhs
Cost of Project	: ₹ 1415 Lakhs
Rate of Return	: 28%
Break Even Point	: 68%

pure and is obtained by calcining limestone and others forms of calcium carbonates.

Hydrated lime has become one of the most important industrial minerals because of its chemical and physical properties, as well as its commercial importance and the simplicity in its production. They are agriculture, water treatment, building, tannery, food processing, breweries, and soft drink, paint and chemical industries.

Calcium & Zinc Stabilizer
for Pipe and Foam board Application

The global metallic stearate market size was valued at USD 3,017.7 million in 2016. The U.S. metallic stearate market size was recorded at USD 263.9 million in 2016 and is anticipated to grow at a CAGR of over 3% from 2017 to 2025.

There are various product types in the industry, including ones based on zinc, calcium, aluminum, and magnesium. The others segment includes, sodium and lithium stearates. The demand for the product in various applications, such as plastics, rubber, pharmaceutical, cosmetics, building & construction, and paints & coatings has increased over the years, and is expected to expand in major markets such as China and India.

PROJECT COST ESTIMATE	
CAPACITY	
Calcium Stabilizer	: 1.33 MT / Day
Zinc Stabilizer	: 1.33 MT / Day
Calcium-Zinc Stabilizer	: 1.33 MT / Day
Plant & Machinery	: ₹ 62 Lakhs
Cost of Project	: ₹ 291 Lakhs
Rate of Return	: 27%
Break Even Point	: 58%

Geotextiles for Road and Construction

The global geotextiles market is expected to be over $12 billion by 2024, growing at a rate of 5-7 per cent. Rapid urbanization in China, India and Brazil along with favorable government initiatives to improve infrastructure will favor the housing, transport, and construction and energy industries, thereby scaling up the size of the geotextiles industry. Increasing environmental concerns along with a shift in consumer trends towards green buildings and material is likely to positively influence industry growth. In India, the geotextiles market is expected to continue the momentum of double-digit growth on the back of a strong infrastructure push. Growing road construction in the country is one of the major factors expected to aid the geotextiles market. The railway sector is another fast emerging application area for geotextiles, as upcoming metro rail, bullet train and high speed train projects in the country are expected to fuel the demand for geotextiles. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE	
CAPACITY	
Geotextiles for Road & Construction	: 2,934 Kgs / Day
Plant & Machinery	: ₹ 326 Lakhs
Cost of Project	: ₹ 665 Lakhs
Rate of Return	: 28%
Break Even Point	: 57%

Fruit Wine

Fruit wines are fermented alcoholic beverages made from a variety of base ingredients (other than grapes); they may also have additional flavors taken from fruits, flowers, and herbs. This definition is sometimes broadened to include any fermented alcoholic beverage except beer. For historical reasons, mead, cider, and Perry are also excluded from the definition of fruit wine. Fruit wines have traditionally been popular with home wine makers and in areas with cool climates such as North America and Scandinavia; in East Africa, India, and the Philippines, wine is made from bananas. Fruit wines are usually referred to by their main ingredient (e.g., plum wine or elderberry wine) because the usual definition of wine states that it is made from fermented grape juice.

PROJECT COST ESTIMATE	
CAPACITY	
Fruit Wine (750 ml size Bollte)	: 2,666.7 Bottles / Day
Plant & Machinery	: ₹ 150 Lakhs
Cost of Project	: ₹ 873 Lakhs
Rate of Return	: 26%
Break Even Point	: 41%

The global wine market was valued at US$ 296.03 billion in 2016 and is slated to reach US$ 404.64 billion by 2025. The market is expected to exhibit a CAGR of 3.23% during the forecast period (2017-2025).

The consumption of Wine in India is found to be increasing with rise of awareness of wine as a good drink for health. The wine market of India observed growth with a CAGR of more than 25% in past five years. Growing popularity of Vineyards as tourism places, higher disposable incomes and growth in foreign tourists, promotion of wine as beneficial to health etc. are some of the reasons for such growth. Global travel and expose to other countries where drinking wine is a part of the lifestyle are also helping to drive the sales of wine in India. As a whole any entrepreneur can venture in this project without risk and earn profit.

Steel Shots & Grits

Steel shots and steel grits are used in both static & site blasting equipment, materials and abrasives used for surface preparation can be hazardous if used carelessly. Many natural regulations exits for those materials and abrasive that are considered to be hazardous during or after use (waste management), such as free silica or carcinogenic or toxic substances.

Steel Grits is fabricated by crushing hardened shot, screening the resulting media and tempering it to a desired hardness. It is used in conting and rust removal where speed of cleaning is serious & rough finish is acceptable. Steel grit's superior hardness and precise microstructure provides maximum durability and impact energy transfer. Highly demanding, aggressive applications are ideal for steel grit.

Steel abrasives are particles of steel with high carbon content that are utilized as abrasive and peening media. Steel abrasives are available in two types based on their shape; shots and grits. Steel shots are spherical grains of molten steel produced through a granulation (atomization) process in requisite sizes or hardness. The steel abrasives market is expected to grow at a good rate in the coming years. Rapid industrialization and expansion of automotive production are the key trends stoking market growth. To decrease environmental issues, leading manufacturers in the automobile sector are manufacturing low-weight products, which emit low carbon dioxide, which are economical and yet provide superior performance.

PROJECT COST ESTIMATE	
CAPACITY	
Capacity	: 100 MT Per Day
Plant & Machinery	: ₹ 1643 Lakhs
Cost of Project	: ₹ 3780 Lakhs
Rate of Return	: 29%
Break Even Point	: 67%

The Indian Steel Abrasives industry is catered to by a

few large players and numerous smaller players that specialise in select products where imports from China cater to the lower end of the market. Due to the soft market conditions in many advanced economies, India is becoming a focus market for major global players resulting in intense competition.

Organic Dragon Fruit Farming

Dragon Fruit stems are scandent (climbing habit), creeping, sprawling or clambering, and branch profusely. There can be 4-7 of them, between 5 and 10 m or longer, with joints from 30–120 cm or longer, and 10–12 cm thick; with generally three ribs; margins are corneous (horn-like) with age, and undulate. The fruit is oblong to oval, to 6–12 cm long, 4–9 cm thick, red with large bracteoles, with white pulp and are edible; seeds are black. Dragon Fruit or Pitaya grows best in uniformly distributed rainfall throughout the year. It prefers free draining soil with sandy to clay loam types, 5.3 to 6.7 pH and high organic matter. However, Pitaya is also grown successfully in sandy soils. Pitaya is shallow rooted with most roots concentrated on top 15-30 cm soil depth.

PROJECT COST ESTIMATE
CAPACITY

Organic Dragon Fruits	: 7200 Kgs/Day
Plant & Machinery	: ₹ 1316 Lakhs
Cost of Project	: ₹ 3183 Lakhs
Rate of Return	: 133%
Break Even Point	: 15%

India gets a taste of exotic dragon fruit. This fruit of a vine-like cactus has white flesh peppered with tiny edible black seeds. Its popularity is growing beyond metros to other cities, particularly in south India. The fruit was selling for about US$10 per kg, according to, director of the Ministry of Agriculture and Rural Development. Vietnamese dragon fruit is selling well in Chinese and Vietnamese in the US, said Mr Dat, who has been on a fact-finding trip in the country. As a whole there is a good scope for new entrepreneur to invest in this business.

Arabic Gum

Gum arabic is a complex mixture of macromolecules of different size and composition (mainly carbohydrates and proteins).Gum Arabic, also known as Gum Acacia, is a natural gum harvested from the exterior of Acacia trees in the form of dry, hard nodules up to 50 mm in diameter, and ranging from almost colourless to brown. Its unique properties endow it with a wide range of uses in food, beverage, pharmaceutical and industrial applications.

PROJECT COST ESTIMATE
CAPACITY

Arabic Gum	: 16 MT/Day
Plant & Machinery	: ₹ 81 Lakhs
Cost of Project	: ₹ 361 Lakhs
Rate of Return	: 28%
Break Even Point	: 57%

The growth of the global market is driven by the rising income levels, multiple functionalities of gum arabic in the food & beverages industry, and the rising awareness regarding the medicinal benefits of gum arabic. Global Industry Analysis and Forecast, 2017-2025," indicate that the market, which is presently worth nearly US$ 300 Mn, will expand steadily at 5.4% CAGR. Which facilitates the development of new technologies and ensure a high quality product.

Hybrid Electric Scooter Assembling

A plug-in hybrid electric vehicle (PHEV) is an HEV that can be plugged-in or recharged from wall electricity. PHEVs are distinguished by much larger battery packs when compared to other HEVs. The size of the battery defines the vehicle's All Electric Range (AER), which is generally in the range of 30 to 50 miles. PHEVs can be of any hybrid configuration. PHEVs start in 'all electric' mode, runs on electricity and when the batteries are low in charge.

PROJECT COST ESTIMATE
CAPACITY

Hybrid Electric Scooter	: 50 Nos./Day
Plant & Machinery	: ₹ 95 Lakhs
Cost of Project	: ₹ 279 Lakhs
Rate of Return	: 34%
Break Even Point	: 74%

India electric scooters and motorcycles market size valued at $24.6 million in 2016, it is expected to grow at a CAGR of 45.4% during 2017- 2025. Some 4,50,000 electric two-wheelers were sold in India in the past eight years. The potential of electric vehicles in this segment is massive, say industry executives, given that more than 17 million two-wheelers are sold annually in the country. This facilitates the development of new technologies and ensures a high quality product.

Metal Cutting Wheels (TMT Bar Cutting)

A cut off wheel, also known as a cutoff wheel or cutting disc, is an arbor-mounted tool that may be used with angle grinders or stationary cutoff saws. Cut off wheels have an abrasive-coated material that is used for grinding a range of materials. Wheels typically provide a fast cutting action, long life, and tend to be cost-effective. The two main types of resinoid-bonded abrasive cutting wheels are Type 1, which are flat, and Type 27, which have a raised hub. The abrasive material used in the wheel is one influencer on cut rate and consumable life.

The most common size for these cutting wheels is 4-1/2 inches in diameter, however they can range from 2 to 16 inches in diameter with a thickness range from 0.045 in to 0.125 in. Type 1 discs are flat, and type 27 discs have a raised hub. These wheels are strong, but not immune to breaking, if a cutting wheel breaks while in use, fragments could injure the operator or a nearby co-workers. To avoid breaking cutting discs, never exceed the maximum speed (RPM) specified on the disc, and do not overload the disc by cutting with excess force or jamming the wheel into your workpiece.

PROJECT COST ESTIMATE
CAPACITY

Metal Cu[illegible]g Wheels	
8" Size (per packs 5 Pcs.)	: 5120 Packs Per Day
Plant & Machinery	: ₹ 143 Lakhs
Cost of Project	: ₹ 323 Lakhs
Rate of Return	: 28%
Break Even Point	: 55%

Abrasive Wheels Market by Product (Bonded Wheels and Super Abrasive Wheels) and by Material Type (Aluminum Oxide, Zirconia Alumina, Silicon Carbide, and Ceramic Aluminum Oxide): The global abrasive wheels market was approximately USD 10.9 billion in 2018 and is expected to generate around USD 17.39 billion by 2026, at a CAGR of around 6.01% between 2019 and 2026. The demand within the global market for grinding discs has been rising on account of standardization of industrial procedures in automotive, iron and steel, and constructions industries.

A grinding disc, also known as grinding wheel, is used in several abrasive machine operations and in abrasive cutting. Grinding machines are used across a range of industries, and the indispensability of grinding discs in these machines is expected to propel demand within the global market. The proven relevance of these discs across multiple industries has helped in earned the trust of the investors and stakeholders in the market.

MIG Welding Wire

MIG Wire is Copper coated strong wire. MIG wires are applied to weld numerous ferrous and non-ferrous materials and give sound results Solid copper coated welding wire for welding in gas shielding atmospheres. MIG welding wire applications are like Pressure Vessels, Heat Exchangers, Automotive parts etc.

The Indian welding consumables market will be worth INR 45.37 bn by 2020. On the basis of type of welding consumables, the demand for wires and fluxes is expected to be high on account of their high performance. They also have several benefits including suitability for outdoor work, use in automatic welding systems, low wastage, and high productivity. This facilitates the development of new technologies and ensures a high quality product.

PROJECT COST ESTIMATE
CAPACITY

MIG Welding Wire	: 840 MT/Annum
Plant & Machinery	: ₹ 122 Lakhs
Cost of Project	: ₹ 318 Lakhs
Rate of Return	: 27%
Break Even Point	: 64%

Empty Hard Gelatin Capsules

Hard gelatin capsules are made of two shells: the capsule body and a shorter cap. They are clear, colorless, and essentially tasteless. Two-piece capsules have been used for almost a century in the pharmaceutical field and the gelatin has been adopted as the main material of these capsules due to its excellent characteristic as a gelatinizer.

The global empty hard gelatin capsules market was valued at $1,841.5 million in 2017 and is expected to reach $3,707.5 million by 2025, registering a CAGR of 9.1% from 2018 to 2025. Capsules are relatively stable shells that contain or encapsulate medicines, which are administered in a variety of dosage forms. As a whole there is a good scope for new entrepreneur to invest in this business.

PROJECT COST ESTIMATE
CAPACITY

Empty Hard Gelatin Capsules	: 2500 Th.Nos./Day
Plant & Machinery	: ₹ 1565 Lakhs
Cost of Project	: ₹ 2149 Lakhs
Rate of Return	: 28%
Break Even Point	: 49%

Liquor from Mahua Flower

Mahua flower belonging to saponaceous family is an important tree. The flowers are largely used in preparation of distilled liquors. The freshly prepared liquor has a strong smoky foetid odour, which disappears on ageing. Red is tilled and carefully prepared liquors are of good quality. The flowers are also used for the preparation of vinegar. The major components of flowers are sugars and additionally it contains proteins, vitamins, organic acids and essential oils. The ripe flowers, which fall from the tree are collected. The yield per tree ranges from 100-200 kgs. These are dried in the sun and sent to distilleries. The yield of proof spirit per tone of mahua flowers is approximately around 450 liters. The cost of dried mahua flowers is quite less in comparable to other raw materials source.

From earliest times man has sought for beverages, which give him refreshment, and now some of them have become almost an essential part of human diet. There are two kinds of beverages non-alcoholic and alcoholic. There are some alcoholic beverages which are fermented but are subsequently distilled is produced with the aid of yeast culture. These strains bring about these fermentation one of the main alcoholic beverages is the country liquor which is the poor man's drink. Country liquor has high intoxicating properties. In India IMFL (Indian Made Foreign Liquors) is too much costly than country liquor, so IMFL is not available for a common man. But being cheaper the country liquor than IMFL, so far a common public, it is quite available, and they consume a huge amount.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 1500 Ltrs/Day
Plant & Machinery	: ₹ 27 Lakhs
Total Capital Investment	: ₹ 142 Lakhs
Rate of Return	: 42%
Break Even Point	: 47%

Worldwide production of country liquors rises steadily each year, which attests the buoyand condition of the producing industries. Future prospects must therefore be extremely rosey. Country liquor is generally used for direct consumption. The people who cannot afford the prices of foreign liquor, they go for country liquor. So mostly poor class people will get full utility from the country liquor. The demand of country liquor is increasing rapidly, so there is wide scope for new entrepreneurs.

Peanut Butter

Peanut butter is a food paste made from ground nut or peanut. It consists essentially of cleaned, graded, blanched, roasted and crushed groundnuts containing about 45 percent of oil and over 25 percent of proteins, being thus a highly nutritive food. Since India occupies the first position both in regard to the area and the production of groundnut, in the world, it is bound to explore all the qualitative values of groundnut, and use it to the maximum.

The major groundnut-producing countries of the world are India, China, Nigeria, Senegal, Sudan, Burma and the USA. Out of the total area of 18.9 million hectares and the total production of 17.8 million tonnes in the world, these countries account for 69% of the area and 70% of the production. India occupies the position, both in regard to the area and the production, in the world. About 7.5 million hectares is put under it annually and the production is about 6 million tonnes. 70% of the area and 75% of the production are concentrated in the four states of Gujarat, Andhra Pradesh, Tamil Nadu and Karnataka. Andhra Pradesh, Tamil Nadu, Karnataka and Orissa have irrigated area forms about 6% of the total groundnut area in India. In United State's half the crop is processed into edible products mainly peanut butter, other products include peanut candy, salted nuts peanut butter is made and consumed primarily in the U.S. The peanuts are shelled and dry-roasted the skins are removed and the nuts are finally ground.

Global trade of Indian Peanuts or Indian Groundnut oil is to the maximum of 100000 tons a year. EU and major importers. Senegal and Argentina are the major Peanuts exporters.

PROJECT COST ESTIMATE
CAPACITY

Peanut Butter	: 8,000 Kgs / Day
Plant & Machinery	: ₹ 126 Lakhs
Cost of Project	: ₹ 562 Lakhs
Rate of Return	: 29%
Break Even Point	: 53%

Around 75% of the crop is produced in khariff (June–September) and remaining 25% in Rabi (November–March). India exported around 100000 tons of groundnut oil in 2003-04 after 4 decades, as crop failed in Senegal and Argentina. Peanuts or Groundnut kernels are approx. 70% of weight in shells and kernels have an oil recovery of 40-42%.

China (2-2.5 million tons), India (1.5-2 million tons) is the major producers of groundnut oil, followed by Sub-Saharan African countries and Central and South America.

Groundnut is the major oilseed of India. It accounts for around 25% of the total oilseed production of the country. Annual production of Indian Peanuts and Indian Peanuts oil are around 5-8mln and 1.5 mln tons respectively. Peanuts Production is highly vulnerable to rainfall deviations and display huge fluctuation between years.

Various drivers for peanut butter market includes rising demand for nutritious products coupled with increasing disposable income of consumers especially in developing countries. Other drivers that fuel the growth of peanut butter market are increasing demand for low calorie healthy food and emergence of hectic life schedule. Changing lifestyle coupled with shift towards the intake of convenient food are also factors that are expected to drive the peanut butter market in the coming four to five years. Major restraint that is expected to hamper the growth of the overall peanut butter market is the availability of peanut at relatively competitive prices coupled with fluctuating production of peanuts especially in India.

Solar Power Plant

Solar power is one of the most promising renewables. It is reliable and less vulnerable to changes in seasonal weather patterns. Hydrogen, in the capacity of energy vector, is expected to be the optimum solution for intermittency and storage of energy produced by renewables. The basic work of Solar Power plant is to generate electricity from Solar Panels. Solar Panels generate DC (Direct Current) electricity from sunlight, Solar Inverter convert this power to AC (Alternative Current) and run your electrical home appliances and machines.

PROJECT COST ESTIMATE

CAPACITY

Solar Power	: 1 MW
Plant & Machinery	: ₹ 411 Lakhs
Cost of Project	: ₹ 811 Lakhs

The total installed capacity of solar power plants in India stands at 13.11 GW as of June 2017.The Indian government significantly expanded its solar plans, targeting US$100 billion of investment and 100 GW of solar capacity by 2022.The installed grid connected solar power capacity is 4,060.65 MW, and India expects to install an additional 10,000 MW by 2017 and a total of 100,000 MW by 2022.Thus, due to demand it is best to invest in this project.

Wheat Starch & Gluten

The India starch and starch derivative market is projected to grow at a CAGR of 5.1% during the forecast period 2020-2025. The growing demand for wheat starch as a stabilizing and gelling agent in several end-use sectors is one of the main drivers of the world market for wheat starch. Wheat starch is used as a thickening agent in various food products. Wheat starch thickens food products by gelatinization and retro gradation. Many wheat starch producers offer healthier products due to the increasing demand for wheat starch as the best gelling agent in a variety of meat products. Wheat starch is mainly used in gluten-free food products, which are consumed mainly by people intolerant to gluten. Wheat starch can also be used as a substitute for fat in various food products. As a result, the global wheat starch market is expected to grow significantly during the forecast period. Thus, due to demand it is best to invest in this project. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE

CAPACITY

Wheat Starch	: 25 MT / Day
Wheat Gluten	: 6 MT / Day
Bran, Fiber & Protein (Bye Product)	: 10 MT / Day
Plant & Machinery	: ₹ 199 Lakhs
Cost of Project	: ₹ 641 Lakhs
Rate of Return	: 28%
Break Even Point	: 62%

Cellulose Fiber

Cellulose Fiber Market is forecasted to reach $42.2 billion by 2025, after growing at a CAGR of 8.1% during 2020-2025. With rise in the consumption in textile industry coupled with growing population, is expected to fuel the demand of cellulose fiber. Growing public interest towards sustainable, skin-friendly, biodegradable, and environment-friendly products will further enhance the overall market demand for cellulose fibers during the forecast period. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE

CAPACITY

Cellulose Fiber	: 20 MT / Day
Plant & Machinery	: ₹ 154 Lakhs
Cost of Project	: ₹ 686 Lakhs
Rate of Return	: 27%
Break Even Point	: 61%

Herbal Health Drink

Global Herbal Tea Market is expected to register a CAGR of 4.94% to reach USD 4,226.9 Million by 2025. Herbal teas or tisanes are caffeine-free and do not use the leaves of the Camellia silences plant. Tisanes are made using a mixture of dried leaves, seeds, grasses, nuts, barks, fruits, flowers, or other botanical elements that provide taste and various health benefits. The global herbal tea market has been largely benefited by the high demand for functional beverages and the launch of new and innovative flavors. Several tea producers are entering the food & beverage industry, which is contributing to the growth of the herbal tea market across the globe. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

CAPACITY

Herbal Health Drink 200 ml Size Bottle	: 30,000 Bottles / Day
Herbal Health Drink 500 ml Size Bottle	: 12,000 Bottles / Day
Plant & Machinery	: ₹ 27 Lakhs
Cost of Project	: ₹ 328 Lakhs
Rate of Return	: 28%
Break Even Point	: 52%

Plastic Waste Recycling Plant

Plastic recycling refers to a process that is performed either mechanically or chemically to recover plastic waste from discarded items for production of reusable plastic. The global plastic recycling market has been gaining a steady momentum over the past few years due to the growing awareness about carbon emissions and the need to reduce them. Citing this reason, the report states that the global plastic recycling market, which was valued at US$31.5 bn in 2015 is expected to reach a figure of US$56.8 Bn by 2024. During the forecast period of 2016 and 2024, the global market is expected to progress at a CAGR of 6.9%. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

CAPACITY

Recycled PP Granules	: 578 Kgs / Day
Recycled LDPE Granules	: 720 Kgs / Day
Recycled HDPE Granules	: 727 Kgs / Day
Recycled Delrin Granules	: 475 Kgs / Day
Recycled PET Granules	: 2,500 Kgs / Day
Plant & Machinery	: ₹ 144 Lakhs
Cost of Project	: ₹ 380 Lakhs
Rate of Return	: 26%
Break Even Point	: 68%

Eggshell Powder

The eggshell membrane powder market is expected to grow at a CAGR of ~13% during the forecast period 2019-2029. The pet food supplement industry is an emerging industry, as consumers are becoming fonder of their pets and take proper care of their nutrition. In order to ensure that their pets get adequate nutrients, consumers prefer pet food supplements that are organic and natural, to avoid any adverse effects on pets. Egg membrane protein powder is mainly used in pet supplements to reduce bone disorders and comfort them in case of seasonal allergies. Hence, this evolving demand for pet supplements is driving the global egg membrane protein powder market. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE
CAPACITY

Eggshell Powder	: 2 MT / Day
Plant & Machinery	: ₹ 11 Lakhs
Cost of Project	: ₹ 42 Lakhs
Rate of Return	: 30%
Break Even Point	: 79%

Sesame Seed Hulling Plant

Sesame seed is rich in fat, protein, carbohydrates, fiber and some minerals. The aroma and taste of the seed are mild and delicious. It has a nut-like slightly sweet flavor. It is used mainly as a food ingredient in whole, broken, crushed, shelled, powdered and paste forms. Sesame seeds have a thin shell or husk which needs to be removed and this process is known as hulling.

PROJECT COST ESTIMATE
CAPACITY

Hulled Sesame Seed	: 15 MT/Day
Plant & Machinery	: ₹ 257 Lakhs
Cost of Project	: ₹ 848 Lakhs
Rate of Return	: 28%
Break Even Point	: 50%

The sesame seed market, in terms of value, is projected to reach around USD 113.28 Billion by 2022, at a CAGR of around 9.9% from 2017. As a whole there is a good scope for new entrepreneur to invest in this business.

Dry Lemon Powder and Lemon Oil

Spray dried lemon juice powder was used to enhance the acceptability and nutritive value. It reserves the most of bioactive ingredients of lemon and also its property (color, smell, and taste) Ingredient: Vitamin c, citric acid, malic acid. Lemon Essential Oil is a natural detoxifier and contains antiseptic properties that aid in clearing the face from pimples and acne. By doing so, lemon also tightens the skin, preventing wrinkles, and removes excess Oils that clog pores and cause blackheads.

PROJECT COST ESTIMATE
CAPACITY

Lemon Powder	: 32 MT/Day
Lemon Oil	: 12 MT/Day
Plant & Machinery	: ₹ 721 Lakhs
Cost of Project	: ₹ 1983 Lakhs
Rate of Return	: 33%
Break Even Point	: 51%

According to Lemons and Limes–Market Report, Analysis and Forecast to 2025", the world market of lemons and limes grew by 19% to $ 13.9 billion. The lemon juice powder market, in terms of value, is projected to reach around USD 93.94 Billion by 2021, at a CAGR of 6.0% from 2016 to 2021.The global lemon essential oils market is projected to register an estimated CAGR of 9.2%, during the forecast period, 2018-2023.

Thus, due to demand it is best to invest in this project.

Active Zinc Oxide from Zinc Ash, Secondary Zinc Waste & EAF Dust

Active Zinc oxide is a chemical compound with formula ZnO. It occurs as white hexagonal crystals or a white powder commonly known as zinc white which is used as a pigment in paints. It is nearly insoluble in water but soluble in acids or alkalis. Chinese white is a special grade of zinc white and used in artists' pigments. Zinc oxide and stearic acid are important ingredients in the commercial manufacture of rubber goods. Active Zinc oxide is valuable and growth-oriented product both for direct application and production of other zinc compounds. Two main processes for producing Active zinc oxide are direct and indirect methods. In the direct or American method, zinc ore is heated in air with coke or anthracite, and the resulting zinc vapors are subjected to the controlled oxidation. In the indirect or French process the zinc vapors to be oxidized are obtained by boiling zinc.

PROJECT COST ESTIMATE
CAPACITY

Active Zinc Oxide	: 20 MT / Day
Plant & Machinery	: ₹ 285 Lakhs
Cost of Project	: ₹ 830 Lakhs
Rate of Return	: 31%
Break Even Point	: 56%

The global Active zinc oxide (ZnO) market size is projected to grow from USD 4.4 billion in 2019 to USD 5.7 billion by 2024, at a compound annual growth rate (CAGR) of 5.4%, during the forecast period. ZnO is a white inorganic compound that is used widely in pharmaceuticals, rubber, ceramics cosmetics, chemicals, and glass industries. The growth of these end-use industries is expected to fuel the global Active zinc oxide market demand over the forecast period.

Rising application of product in paints and coatings is projected to drive the Active zinc oxide market growth. One trend in the market is increasing use in semiconductor industry. The growing demand for Active zinc oxide in the production of varistors, ferrites, and solar cells is expected to propel the growth of the global Active zinc oxide market in the forecast period. The major driver in the market is growing demand for Nano Active zinc oxide. Nano Active zinc oxide is a specialized nanomaterial that is mainly available in the form of dispersions and powders. Companies operating in the Active zinc oxide market are also focusing on new product development and agreement to tap the opportunities in applications, such as solar energy, surface coatings, and pharmaceuticals. The Europe market is mature and developed stably in the past few years and will keep the trend in the next years. North America, led by the U.S. is expected to account for substantial growth in the market during the forecast period. As a whole any entrepreneur can venture in this project without risk and earn profit.

HDPE/PP Bags

Woven polypropylene/HDPE bags or simply woven PP/HDPE bags are considered to be the toughest packaging bags, widely used to pack materials for grain, milling and sugar industry. HDPE/PP oriented strips are becoming increasingly popular in India & have caught the eye of many end users for their requirement of packing materials. HDPE sacks have an edge over the conventional jute sacks in the sense that the former are light in weight, strong and attractive. The major users of HDPE/PP woven sacks are fertilizer, sugar, cattle feed, cement & other chemical Industries. Today, PP

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 1846 Kg/Day
Plant & Machinery	: ₹ 645 Lakhs
Cost of Project	: ₹ 1411 Lakhs
Rate of Return	: 24%
Break Even Point	: 66%

sacks enjoy a good market share in India and is likely to continue to do so as such in the coming years.

With an investment of ~ INR 28,000 crore, it employs about 13 lakh workers, with installed processing capacity of 2800 KTA, gross annual turnover of INR 30,000 crore and enjoys the reputation of making an important economic contribution to the country's growth. Thus, due to demand it is best to invest in this project.

Micronutrients Fertilizer

Micronutrient-efficient varieties grow deeper roots in mineral deficient soils and are better at tapping subsoil water and minerals. When topsoil dries, roots in the dry soil zone (which are the easiest to fertilizer) are largely deactivated and the plant must rely on deeper roots for further nutrition. The micronutrients are boron (B), copper (Cu), iron (Fe), manganese (Mn), molybdenum (Mo), zinc (Zn), and chloride (Cl).

Mixing micronutrients with fluid fertilizers has become a popular method of application. Clear liquids are commonly used as starter fertilizers for row crops and some micronutrients, especially zinc sources, are easily applied with these fluids.

Agriculture micronutrients are gaining popularity globally for obtaining better yield output. The global agriculture micronutrients market value is anticipated to increase from US$ 6,576.9 Mn in 2015 to US$ 13,344.2 Mn by 2024, expanding at a CAGR of 8.3% during the forecast period (2016–2024). As a whole there is a good scope for new entrepreneur to invest in this business.

PROJECT COST ESTIMATE
CAPACITY

Micronutrient Fertilizer for Fruits	: 1,250 Kgs/Day
Micronutrient Fertilizer for Vegetables	: 750 Kgs/Day
Plant & Machinery	: ₹ 58 Lakhs
Cost of Project	: ₹ 345 Lakhs
Rate of Return	: 27%
Break Even Point	: 55%

Phenolic Formaldehyde Resin

Phenol formaldehyde resins (PF) or Phenolic resins are synthetic polymers obtained by the reaction of phenol or substituted phenol with formaldehyde. Used as the basis for Bakelite, PFs were the first commercial synthetic resins (plastics). They have been widely used for the production of molded products including billiard balls, laboratory countertops, and as coatings and adhesives.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 1,000 Kg/Day
Plant & Machinery	: ₹ 34 Lakhs
Cost of Project	: ₹ 144 Lakhs
Rate of Return	: 24%
Break Even Point	: 66%

The global Phenolic Resins market size was valued at USD 12.63 billion in 2019 and is anticipated to grow at a CAGR of 5.4% during the forecast period. Expansion of end-use industries such as automotive, construction and consumer electronics is likely to drive demand for these unique resins. Entrepreneurs who invest in this project will be successful.

Glucose Saline

Glucose, also known as dextrose, is a simple sugar that can be found in nature and are chemically identical. Dextrose may decrease body protein and nitrogen losses, promote glycogen deposition, and decrease or prevent ketosis if sufficient doses are given. Since dextrose is usually metabolized to carbon dioxide and water, administration of a solution of dextrose and water is equivalent to providing the same volume of free water.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 200000 Bottles/Day
Plant & Machinery	: ₹ 2170 Lakhs
Cost of Project	: ₹ 4083 Lakhs
Rate of Return	: 25%
Break Even Point	: 37%

It is generally used in the patient who has lost his body fluid. Saline solution is used when large amount of sodium has been lost by vomiting or by gastric or intestinal duodenal aspiration or through animation fistula.

The global intravenous solutions market reached a value of US$ 8.5 Billion in 2019. IV solutions and electrolytes are mainly used for fluid resuscitation, routine maintenance, replacement, and redistribution. The Market size value in 2020 is USD 86.2 million and Revenue forecast in 2025 is USD 121.7 million is expected to exhibit a CAGR of 7.1% from 2018 to 2025. As a whole any entrepreneur can venture in this project without risk and earn profit.

Baby Diaper (T-shape and Pull-up Pants)

Diapers are primarily worn by children who are not yet potty trained or experience bedwetting. During the 1950s, companies such as Johnson and Johnson, Kendall, Parke-Davis, Playtex, and Molnlycke entered the Baby diaper market, and in 1956, Procter & Gamble began researching Baby diapers. They have helped many families with low income to get diapers needed for their babies.

Several improvements were made, such as the use of double gussets to improve diaper fit and containment. Modern Baby diapers products have a layered construction, which allows the transfer and distribution of urine to an absorbent core structure where it is locked in. According to "India Diaper Market Outlook, 2021", India's diaper market was growing with a CAGR of 22.23% over past five years. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE
CAPACITY

Pull-up Baby Pant Single Diaper (4 Pcs/Pkt)	: 60000 Pkt/Day
T-shape Open Style Baby Diaper (4 Pcs/Pkt)	: 60000 Pkt/Day
Plant & Machinery	: ₹ 2600 Lakhs
Cost of Project	: ₹ 4178 Lakhs
Rate of Return	: 29%
Break Even Point	: 36%

Oxygen and Nitrogen Gas Plant (Medical and Industrial Grade)

Limelight used oxygen derived from sources such as the barium oxide Brin process. This process was based on the production of barium peroxide by roasting barium oxide in air at 590°C, then raising the temperature to 870°C. At 870°C the peroxide formed decomposes back into oxide, releasing more or less pure oxygen which can then be cooled and compressed into steel gas cylinders. Although crude, the process was ingenious in that it required no continuous input of raw materials other than air and energy. Oxygen is non corrosive and can be contained in any common metals. However care must be taken to remove all oil, grease and other combustible material from piping and containers before putting them into oxygen service.

Nitrogen gas is a compound that forms from elemental nitrogen, which is found abundantly throughout the planet's atmosphere and in most biochemical reactions. One of nitrogen's unique properties is its ability to form multiple bonds with various other elements and compounds. India industrial gases market was valued at $ 2.1 billion in 2017 and is forecast to grow at a CAGR of over 11% to surpass $ 3.9 billion in 2023 on account of growing demand from metal industry, particularly steel. As a whole any entrepreneur can venture in this project without risk and earn profit.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 200 Cumtrs/Hr.
Plant & Machinery	: ₹ 183 Lakhs
Cost of Project	: ₹ 675 Lakhs
Rate of Return	: 26%
Break Even Point	: 50%

Vitamin 'C' from Sorbitol

Vitamin c is chemically the simplest of the vitamins and for this reason was among the first to be isolated, characterized, and purified and to have its structure determined. More vitamin C is produced industrially than any other vitamin, or indeed all the other vitamins put together. Vitamin C has been the subject of frequent controversy, even before its nature had been established.

Its role (as a constituent of fruits and vegetables) in the cure and prevention of scurvy was widely debated for hundreds of years. Ascorbic acid is generally used in bread due to its properties that help extend shelf life, high profile industrial bakers such as Hovis and Kings mill both use ascorbic acid in the majority of their loaves.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 600 Kg/Day
Plant & Machinery	: ₹ 371 Lakhs
Cost of Project	: ₹ 717 Lakhs
Rate of Return	: 24%
Break Even Point	: 50%

When used as part of the baking process, ascorbic acid contributes to a number of improvements to the loaf including the presence of a broad distribution network of companies in this region will boost the Asia Pacific vitamin ingredients market in the near future. Analysts predict this regional market to rise at a CAGR of 5.40% from 2017 to 2025 in terms of value. Entrepreneurs who invest in this project will be successful.

Single Wall Steel Water Bottle

Water bottles are available in different shapes, colors, and sizes. The stainless steel bottle comes with a string to provide ease of carrying. Stainless steel fridge bottle is made from high-quality steel, food-grade and BPA-free stainless steel material that make the bottles safe for use on a regular basis. The taste and nutritive value of the drinks remains intact making the bottle very appropriate choice for storing beverages. Water bottles can be either disposable or reusable.

Metal water bottles are growing in popularity. Made primarily from stainless steel or aluminium (aluminium), they are durable; retain less odor and taste from previous contents than most plastic bottles. Double-walled metal bottles are insulated to keep cold liquids cold and hot liquids hot, without the external surface being too hot or too cold. Because double-walled bottles have more metal in them.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 2,000 Nos/ Day
Plant & Machinery	: ₹ 138 Lakhs
Cost of Project	: ₹ 439 Lakhs
Rate of Return	: 29%
Break Even Point	: 64%

The market is expected to reach INR ~403.06 Bn by the end of 2023, from its current value of INR ~160 Bn, expanding at a compound annual growth rate (CAGR) of ~20.75% from 2018. Based on volume, the market is likely to reach ~35.53 Bn liters by 2023, expanding at a CAGR of ~18.25% from 2018 to 2023. Entrepreneurs who invest in this project will be successful.

Composite Materials
(Carbon Fibre Composites & Glass Fibre Composites)

The future of the composites market looks attractive with opportunities in the transportation, construction, wind energy, pipe & tank, marine, consumer goods, electrical and electronics, aerospace, and others. The composite materials market is expected to reach an estimated $40.2 billion by 2024 and it is forecast to grow at a CAGR of 3.3% from 2019 to 2024. The composites end product market is expected to reach an estimated $114.7 billion by 2024. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE
CAPACITY

Carbon Fibre Composite Laminate M2 width 1500 mm	: 833.3 Sq. Mt. / Day
Glass Fibre Composite Laminate M2 width 1500 mm	: 833.3 Sq. Mt. / Day
Plant & Machinery	: ₹ 115 Lakhs
Cost of Project	: ₹ 452 Lakhs
Rate of Return	: 29%
Break Even Point	: 67%

Mink Blanket

Mink blankets (also called Raschel blankets) were mainly made from acrylic fibers. The blanket is made from a synthetic acrylic blend. The typical make-up of a mink blanket is 85% acrylic and 15% polyester. The acrylic supplies the "softness" while the polyester keeps the mink blanket or throw blanket from wrinkling. It is woven to feel like mink. A blanket is a type of bedding. It is, generally speaking, a large piece of woven cloth, intended to keep the user warm, especially while sleeping or lying down. Mink blankets are the most luxurious and elegant bed products which can be used to elevate the interiors of home. Appreciated for their colorfastness, durability and fine textures these blankets are much loved by the people for their elegant designs. Their maintenance is very easy even simple cleaning will work well for these blankets. Soft enough in texture they provide relaxing and sound sleep by protecting the bodies from weather conditions.

PROJECT COST ESTIMATE
CAPACITY

Double Bed Blankets (3.80 Kgs Size)	: 2236 Nos. Per Day
Single Bed Blankets (2.50 Kgs Size)	: 2800 Nos. Per Day
Baby Blankets (0.60 Kgs Size)	: 7500 Nos. Per Day
Plant & Machinery	: ₹ 2660 Lakhs
Cost of Project	: ₹ 6252 Lakhs
Rate of Return	: 26%
Break Even Point	: 40%

The global blanket market size was valued at USD 17.0 billion in 2018. Growing application of blankets in the commercial sectors including travel and hospitality, military and defense, and charity is expected to have a positive impact on the market growth. Furthermore, the market has seen a boom as a result of innovation and ease of product

availability in affordable price ranges. The demand for blankets is met through import and local production. Blanket is manufactured in standard sizes. The standards are based on the surface area of the blankets and the specific weight of the blankets. Accordingly, blankets could be light or medium in weight.

Dry Fruits Processing (for Snack, Almond, Pistachio and Cashew Nut)

Dried fruits are one of the most popular products made by small-scale processors. Drying removes the water from fruits so that the growth of micro-organisms is inhibited. It also reduces the weight and bulk of foods which cuts down on transport and storage costs. Walnuts, Cashew nuts, Almonds, pine nuts, Pistachio provided a high calorie intake. Nuts are used by mankind for food, edible oils, spices, condiments or beverages. Nuts are a rich source of protein, dietary fibre, vitamins and minerals. This makes them a popular snack which is both tasty and nutritious.

PROJECT COST ESTIMATE
CAPACITY

Almond Dry Fuits	: 2.5 MT/Day
Pista Dry Fruits	: 2.5 MT/Day
Cashew Nut Dry Fruits	: 2.5 MT/Day
Plant & Machinery	: ₹ 130 Lakhs
Cost of Project	: ₹ 822 Lakhs
Rate of Return	: 31%
Break Even Point	: 56%

The nut and dried fruit industry in India is currently pegged at INR 15,000 crores (~ USD 2 billion) and is estimated to grow to INR 30,000 crores (~ USD 4 billion) by 2020, according to the Chairman of Royal Dried Fruits Range, a city-based dried fruits retailer. The global nuts and seeds market to grow at a CAGR of 4.5% during the period 2016-2020. This facilitates the development of new technologies and ensures a high quality product.

Coal Washery Unit

Coal Washing Unit is one of the most important units for up-gradation of Coal in sense of fed value by reducing of ash content in the Coal. It is basically associated with sieve of position to get the quality Coal. Qualities of coal depend upon its ash content. Coal washing is a process of separation mainly based on differences in specific gravity of coal and associated impurities like sand, ash etc. The course will deal theoretical and practical aspects of coal washing processes and equipment.

PROJECT COST ESTIMATE
CAPACITY

Coal Washing (Job Work)	: 3000MT/Day
Plant & Machinery	: ₹ 668 Lakhs
Cost of Project	: ₹1735 Lakhs
Rate of Return	: 12%
Break Even Point	: 68%

Coal demand in 2020 is unlikely to be anywhere near 1,500 MT for domestic coal. The Government of India plans to achieve a domestic coal production target of 1.5 billion tonnes by 2020–an ambitious growth from 2015's production of 612.4 million tonnes. At present 8% of coal production is through underground mining technology. If CIL has to produce even 900 MT by 2020. Thus, due to demand it is best to invest in this project.

Neem Oil (Cold Process)

Neem oil is obtained from the seeds of neem tree. Utilization of neem seeds is to be set with the problem of organization of systematic collection and crushing of seeds. Neem oil is usually opaque and bitter but it has recently been shown that it can be processed into non bitter edible oil with 50% oleic acid and 15% linoleum acid. 'Neem oil extractives', a waste from neem oil refining has been found to be effective mosquitolarvicide. The material acts as instant killer of the first in star larvae of Culex-fatigans at 0.04% concentration whereas at lower concentrations it had delayed toxicity.

PROJECT COST ESTIMATE
CAPACITY

Neem Oil	: 150 Kgs/Day
Deoil Cake as by product	: 1680 Kgs/Day
Plant & Machinery	: ₹ 23 Lakhs
Cost of Project	: ₹ 51 Lakhs
Rate of Return	: 27%
Break Even Point	: 67%

Azadirachtin, an active compound derived from neem seeds and other parts has natural insecticidal properties. It is potentially a substitute for synthetic pesticides used in crop production. Projected growth in global bio-pesticide market at CAGR of 15.8 per cent from 2012 to 2017 could be a prospective growth driver for the neem products in future. As a whole there is a good scope for new entrepreneur to invest in this business.

Layer Poultry Farming

Layer poultry farming means raising egg laying poultry birds for the purpose of commercial egg production. Layer chickens are such a special species of hens, which need to be raised from when they are one day old. They start laying eggs commercially from 18-19 weeks of age. They remain laying eggs continuously till their 72-78 weeks of age. They can produce about one kg of eggs by consuming about 2.25 kg of food during their egg laying period.

India is third largest egg production and fifth in chicken meat producer in the world. India has a population of 1.2 billion and 50% of India's workforce is in agriculture. The total egg production has increased from 27.33 Billion during 2015-17 (Rainy) to 29.09 Billion during 2016-18 (Rainy) registering a growth 6.42%. As against the targeted production of 87.05 Billions of eggs during 2016-18, the total estimated production in two seasons, summer and rainy, is 55.11 Billion showing an achievement of 63.31%. As a whole there is a good scope for new entrepreneur to invest in this business.

PROJECT COST ESTIMATE
CAPACITY

Egg Production (Packed 30 Eggs per Tray)	: 25000 Nos./Day
Spent Hens	: 83 Nos./Day
Plant & Machinery	: ₹ 57 Lakhs
Cost of Project	: ₹ 239 Lakhs
Rate of Return	: 28%
Break Even Point	: 35%

Tissue Paper from Recycled Paper

Tissue paper or simply tissue is a light weight paper or, light crêpe paper. Tissue can be made from recycled paper pulp. Tissue is a category comprising products made from low grammage, dry creped and some non-creped papers such as toilet paper, kitchen towels, napkins, facials, handkerchiefs, hand towels and wipes.

India tissue and wipes products market is one of the growing categories in hygiene industry of the country. Tissue paper market is segmented mainly into paper napkins, toilet papers, facial tissues and other tissue based products. According to

PROJECT COST ESTIMATE
CAPACITY

Tissue Paper	: 20 MT/Day
Plant & Machinery	: ₹ 410 Lakhs
Cost of Project	: ₹ 986 Lakhs
Rate of Return (ROI)	: 27%
Break Even Point (BEP)	: 56%

Continue on Page 31

MARKET SURVEY
Cum
Detailed Techno Economic Feasibility Reports

npcs
AN ISO 9001 : 2015 CERTIFIED COMPANY

EACH DETAILED PROJECT REPORT 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 Equipment's 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.

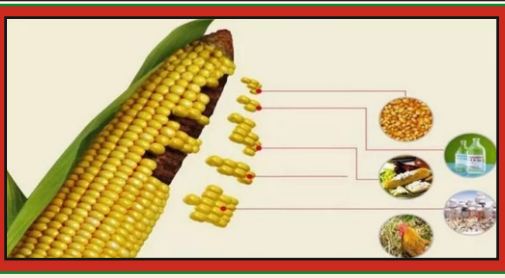
LAND & BUILDING : Requirement of Land Area, Rates of the Land, Built up Area, Construction Schedule, Plant Layout.

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, 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.



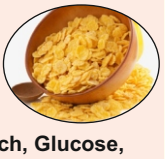
Maize Processing Industry, Maize, Corn and its By Products, Derivatives, Corn Starch, Dextrose, Liquid Glucose, Sorbitol, Oil, Gluten, Germ Oil, Wet Milling, Maize Starch Plant & related Products, High-Fructose Corn Syrup (HFCS)

- Biodegradable Plastic Bags from Corn Starch
- Cassava Starch (Tapioca Starch)
- Cold Water Soluble Starch
- Corn Flakes in Various Shapes & Design
- Corn Oil (Maize Oil)
- Corn Processing Plant (For Glucose Syrup & Fructose)

- Corn Starch (Maize Starch or Corn Flour) Based Manufacturing of Biodegradable (Eco-Friendly or Compostable) Tableware

- Dextrin from Starch
- Dextrose 5%
- Dextrose Anhydrous, Sorbitol & Vitamin C
- Dextrose Injection
- Dextrose Powder
- Edible Corn Oil
- High Fructose Corn Syrup (HFCS)
- Liquid Glucose from Maize
- Maize And It's By Products (Maize Starch, Sorbitol, Liquid Glucose, Dextrose Monohydrate, Dextrose Anhydrous, Gluten, Vitamin C and Maltodextrin)

- Maize Processing (Glucose, Sorbitol and Oil)
- Maize Processing Starch, Glucose, Germs, Fibres, Gluten and Steep Water
- Maize Wet Milling Process
- Minerals Enriched Corn Flakes in Various Shapes
- Parboiled Rice Mill with Rice & Corn Flakes
- Polyester Fiber from Corn/Starch
- Pregelatinized Starch.
- Rice and Corn Flakes
- Sorbitol, Maltitol, Dextrose Anhydrous and Vitamin-C



- Starch & Starch Derivatives (Starch, Glucose, Maltodextrin, High Maltose Syrup & Powder, Dextrose Monohydrate, Dextrose Anhydrate & Sorbitol)
- Wall Paper Starch
- Wheat Starch and Wheat Gluten

Market Survey Cum Detailed Techno Economic Feasibility Report on All Above Projects are Available. Contact :

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AN ISO 9001:2015 CERTIFIED COMPANY
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Website : www.niir.org ● www.entrepreneurindia.co ● E-mail : info@niir.org , npcs.india@gmail.com

Milk & Dairy Products, Butter, Cheese, Ghee, Ice Creams, Chocolate, Curd, Lassi, Flavored Milk, UHT Milk, Fluid Milk, Milk Powder, Skimmed Milk Powder Non-Dairy Cream, Buttermilk, Condensed Milk, Cottage Cheese, Casein, Yogurt, value added Dairy Products

- Baby Cereal Food
- Casein from Milk
- Cattle Breeding & Dairy Farming to Produce Milk
- Cheese Analogues

- Chocolate
- Chocolate Drink (Liquid Form)
- Chocolate, Toffee and Candy Industry
- Cow and Buffalo Milk UHT Plant
- Dairy Farm for Milk (500 Buffaloes)
- Dairy Farm to Produce Milk (Pouches & Cans)

- Dairy Farming (500 Cows)
- Dairy Farming (Cow)
- Dairy Farming, Milk Products with Cow Urine Processing and Biogas Plant
- Dairy Farming and Dairy Products (Pasteurized Milk, Curd, Butter, Ghee, Paneer and Butter Milk)
- Dairy Farming with Breeding and Dairy Products
- Dairy Farming With Power Plant Based on Dung
- Dairy Milk Processing with Power Plant
- Dairy Whitener, Milk Powder

- Ghee Manufacturing Unit
- Ice Cream & Ice Candy
- Ice Cream of Different Flavours
- Milk & Dairy Processing
- Milk Chilling & Packaging Plant, Milk Processing Plant (Milk Chilling and Milk Packaging)
- Milk Powder (SMP, WMP and Dairy Whitener)
- Milk Processing & Dairy Products (Butter, Yogurt, UHT Milk, Cheese, Ice Cream, Paneer, Ghee & other Products)
- Milk Processing and Dairy Products (Ghee, Khoa, Cream, Toned Milk 3% Fat, Thandai, Shrikhand)

- Peanut Butter
- Premixed Tea and Coffee with Sugar and Milk Powder
- Skimmed Milk Powder
- Soyabean Cultivation and Processing for Soy Nuggets (Nutrela), Paneer and Milk
- Vanaspati Ghee
- Yoghurt

Packaging, Holograms, Printing, Publishing, Screen Printing and DTP

- Aluminium Beverage Cans

- Aluminium Bottles Caps, Metal Caps for Food Grade
- Aluminium Cans for Brewery Industry
- Aluminium Collapsible Tubes (Printed)
- Aluminium Foil
- Aluminium Foil Container
- Aluminium Pilfer Proof Caps

- Aluminium Printing Plate for Offset Printing Machine
- Aseptic Paper
- Biodegradable Plastic Bags from Corn & Cassava Starch
- Blow Moulded Containers (HM, HDPE)
- BOPP Pressure Sensitive Self Adhesive Tape
- Carton Boxes
- Carton Boxes (using Duplex Paper Board)
- Composite Cans from Paper Tube

- Corrugated Boxes
- Corrugated Carton Board
- Corrugated Sheet Board & Boxes
- Disposable Plates from Banana Leaves
- DTP and Offset Printing
- Expandable Polystyrene
- Flexible Cartons, Stickers, Labels Manufacturing & Printing with Aluminium Foil

Market Survey Cum Detailed Techno Economic Feasibility Report on All Above Projects are Available. Contact :
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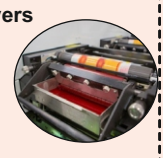
Website : www.niir.org ● www.entrepreneurindia.co ● E-mail : info@niir.org , npcs.india@gmail.com

- Flexible Packaging with Gravure and Flexo Printing with Extrusion in 3/5/7 Layers

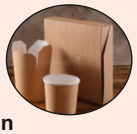


- Flexographic Printing
- Fruit Juice in Aseptic Packaging
- Fully Automatic Single Stage Plant for Pet Jar & Pet Bottles
- Glass Bottles for Cosmetics
- Glass Bottles for Wine

- Glass Bottles using Broken Glass (Recycling of Glass)
- Gunny Bags
- HD and PP Woven Sacks by Circular & Plain Looms with Lamination & Printing
- HDPE PP Bags
- HDPE Woven Sacks
- HDPE, PP Woven Fabric from Tape Line Using Circular Looms and Sacks Making with Lamination of BOPP, BOPET, LDPE and Printing
- Hologram Sticker-3D
- Intermediate Bulk Containers (IBC)
- Jute Ropes Sutli

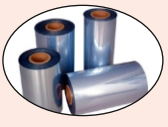
- Jute Shopping Bags
- Jute Yarn, Jute Sutli & Hessian Cloth Weaving Integrated Unit
- Kraft Paper

- Kraft Paper from Bagasse
- Kraft Paper from Waste Carton Boxes
- LDPE LLDPE Pouch Films
- Metalised Colour PVC and Metalised Rainbow PVC Sequence and Sparklers
- MS Barrels (Metal Barrels used in Oil Packaging)
- Multicolour Newspaper Publishing Unit
- Multicoloured Glass Bottle with Cork Cap on Top
- Non-Woven Bag
- Non-Woven Fabric Bag (Stitching)
- Packaged Drinking Water
- Packaging of Tomato Paste
- Paper Bags for White Cement
- Paper Bags for White Cement Packaging
- Paper Board Cartons



- Paper Core
- Paper Cups, Plates and Boxes
- Paper Shopping Bags with Printing
- Pet Bottle Containers from Pet Resin
- Pet Bottle Recycling
- Pet Bottles and Containers from Pet Resin
- Pet Preform from Pet Resin
- Photo Emulsion for Rotary Screen Printing
- Plastic (PVC) Laminated Collapsible Tubes
- Plastic Carry Bags (HM-HDPE LDPE)
- Plastic Collapsible Tubes
- Plastic Collapsible Tubes for Tooth Paste, Cream, Gel, Cosmetics & Pharmaceutical
- Polyester Master used for Mini Offset Printing
- Pouch Packing Automatic Plant -Flexible Packaging (Namkeen, Spice, Mehandi, Milk, Ghee and Zipped Pouches)

- PP Bags for Cement
- PP HDPE Cement Packaging Bags
- PP Woven Bags (for Cement Packing)
- Printed Envelopes (with Window without Window in Single Colour & Multi Colour)
- Printed Paper Shopping Bags



- PVC Flex Banner
- PVC Shrink Sleeves
- Rigid PVC Film (for Pharma & Thermoforming Packaging)
- Rotogravure Printing
- Sugarcane Juice Extraction and Packaging in Aseptic Packaging
- Thermocole (EPS) Cup, Glass & Plates
- Thermocole Sheet and Its Moulded Products

Paints, Pigments, Enamels, Varnishes, Solvents, Thinners, NC Thinner, Decorative, Domestic, Automotive, Textured & Industrial Paints, Wall Coatings, Primer, Protective Coatings, Wood Primer, Fillers, Undercoats, Putty, Epoxy Paints, Paint Additives

- Acetates Production

- Acrylic Emulsion Paints
- Aluminium Paint
- Automobile Paints for Car
- Blending and Bottling of Thinners and Solvent Thinners

- Cement Paint
- Cenosphere Processing Plant
- Clear Transparent Lacquer for Coating on Brass
- Coating of Titanium Dioxide on Plastic Surfaces
- Colour CEM (Snowcem)
- Dry Distemper
- Epoxy Resin

- Fusion Bonded Epoxy Coating on TMT Bars FBE Coating
- High Performance Pigments (HPP)
- High Temperature Aluminium Based Paint
- High Temperature Thinner

- Industrial Paints
- Infrared Reflected (IR) Paint
- Insulating Varnish
- Iron Oxide

- Lake Colours (Pigments)
- Latex Paints for Roof

Market Survey Cum Detailed Techno Economic Feasibility Report on All Above Projects are Available. Contact :
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SELECTED PROJECTS FOR RIGHT INVESTMENT

- Litharge (Yellow Lead Oxide Barton Pot Process)
- Motor Coil Insulating Varnish
- NC Thinner
- Nitrocellulose Thinner for Auto Parts
- Oil based Paint
- Paint Additives (Anti Settlins, Dispersing and Thickning Agents)
- Paint Brush
- Paint Industry (Decorative Paint & Acrylic Emulsion Paint)
- Paints & Varnishes
- Peelable Coating for Construction and Automobile Industry
- Plaster of Paris Emulsion
- Polyester Putty for Cars
- Powder Coating (Chamber Type)
- Powder Coating Paints
- Printing Technology
- Red Oxide from Waste Ferrous Sulfate of H-Acid
- Red Oxide Paint
- Red Oxide Primer
- Red Oxide Primer from Mill Scale
- Solvent and Thinners
- Synthetic Iron Oxide from Iron Oxide Liquor/ Sludge by Laux Process (Red, Yellow, Green, Blue)
- Thinners and Solvent Thinners (Blending and Bottling)
- Titanium Dioxide (Tio2)
- Turpentine Oil
- Wall Putty
- Water based Cement Primer
- Water-based Lacquers





SELECTED PROJECTS FOR YOU

estimates from market research company Euromonitor, the India tissue paper and hygiene product market will grow significantly until 2020. During this time, the market size will increase from current 57.8 billion Rupee ($870 million) to 100 billion Rupee ($1.5 billion). Thus, due to demand it is best to invest in this project.

Meat Analogue, Vegan Meat & Mock Meat from Soyabean and Wheat Gluten

A meat analogue, also known as a meat alternative or substitute, or as mock, imitation, vegetarian, or vegan meat, approximates certain aesthetic qualities (such as texture, flavor, appearance) or chemical characteristics of specific types of meat. Generally, meat analogue means a food made from vegetarian ingredients, and sometimes without animal products such as dairy. Many analogues are soy-based (e.g. tofu, tempeh) or gluten-based, but now may also be made from pea protein.

The target market for meat analogues includes vegetarians, vegans, non-vegetarians seeking to reduce their meat consumption, and people following religious dietary laws in Hinduism, Judaism, Islam, and Buddhism. Increasingly the global demand for sustainable diets in response to the outsized role animal products play in global warming and other environmental impacts has seen an increase in industries focused on finding substitutes similar to meat.

There has been an increased leaning towards non-meat based protein alternatives. International players such as Impossible Foods and Beyond Meat which offer substitute products for meat have been doing brisk business. Infact, reports predict that the global meat substitute market size which was valued at $4.1 billion in 2017 is expected to scale up to $8.1 billion by 2026.

PROJECT COST ESTIMATE

CAPACITY

Meat Analogue (200 gms each Pack)	: 1000 Packs / Day
Vegan Meat (200 gms each Pack)	: 1000 Packs / Day
Mock Meat (200 gms each Pack)	: 1000 Packs / Day
Plant & Machinery	: ₹ 17 Lakhs
Cost of Project	: ₹ 138 Lakhs
Rate of Return	: 29%
Break Even Point	: 62%

India meat substitutes market is expected to grow at a CAGR of close to 10% during the forecast period. The India meat substitutes market is driven by rising health concerns coupled with growing awareness about various diseases caused due to lack of proteins among consumers. Also, increasing vegan population in India is expected to bolster the growth of market over the next few years. Growing demand for plant-based meat products among the population is further aiding the growth of India meat substitutes market over the coming years. Thus, due to demand it is best to invest in this project.

Ciprofloxacin Hydrochloride

Ciprofloxacin is a synthetic chemotherapeutic antibiotic of the fluoroquinolone drug class. It is a second-generation fluoroquinolone antibacterial. It kills bacteria by interfering with the enzymes that cause DNA to rewind after being copied, which stops synthesis of DNA and of protein. Ciprofloxacin is not to be used in infants as they have not developed sufficient enzymes to metabolize the drug. Severe adverse reaction will occur in this patient group.

PROJECT COST ESTIMATE

CAPACITY

Ciprofloxacin Hydrochloride	: 600 Kegs'/Day
Plant & Machinery	: ₹ 201 Lakhs
Cost of Project	: ₹ 580 Lakhs
Rate of Return	: 27%
Break Even Point	: 58%

Ciprofloxacin is used to treat a number of infections including: infections of bones and joints, endocarditic, gastroenteritis, malignant otitis externa, respiratory tract infections, cellulites, urinary tract infections, prostitutes, anthrax, chancroid, among others. This medication is used to treat a variety of bacterial infections. Ciprofloxacin belongs to a class of drugs called quinolone antibiotics. It works by stopping the growth of bacteria. This antibiotic treats only bacterial infections. It will not work for virus infections (such as common cold, flu). Using any antibiotic when it is not needed can cause it to not work for future infections.

The global API market is poised to grow at a CAGR of around 6.6 per cent over the next decade to reach approximately US $238.8 billion by 2025. The prominent trends that the market is witnessing include, growing geriatric population, rapid growth in biopharmaceuticals sector and technological advancements in API manufacturing. Indian pharmaceutical sector is expected to grow to US$ 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, biological, Ayush and herbal products and surgical. 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. Thus, due to demand it is best to invest in this project.

Truck Body Building

A truck or lorry is a motor vehicle designed to transport cargo. Trucks vary greatly in size, power, and configuration; smaller varieties may be mechanically similar to some automobiles. Commercial trucks can be very large and powerful, and may be configured to mount specialized equipment, such as in the case of fire trucks and concrete mixers and suction excavators.

Already at 1.31 billion, by 2027 India's population will be the largest in the world, at over 1.4 billion. Growth means urbanisation, and urbanisation requires 'stuff'. As small villages develop into large, and as people move from rural to urban locations, so demand for 'stuff' will increase. Great news for truck fleets, and the OEMs who supply those stuff-hauling fleets; but the changes to trucking in India over the next decade will be seismic in proportion. Just about the only certainty is that 'Trucking India' in 2027 will look very different from its 2017 ancestor. Entrepreneurs who invest in this project will be successful.

PROJECT COST ESTIMATE
CAPACITY

Truck Body Building	: 20 Nos./Day
Plant & Machinery	: ₹ 362 Lakhs
Cost of Project	: ₹ 1709 Lakhs
Rate of Return	: 31%
Break Even Point	: 56%

Sugar Candy (Soft & Hard Boiled)

Candy or Sweet is the most popular type of confectionery over the world, and there is certainly something about this unique product that holds many mysterious qualities. Generally candies are available in fruit based flavors or Milk based flavor and sometimes with centre filling also. The confectionery category includes products such as chocolate, gum, sugar confectionery, gummies/jellies, hard candy, toffee and fudge. The main reasons for purchasing are convenience, passive health, age, choice and pleasure. The most popular flavour groups are brown flavours, fruit, nuts, mints & menthols and dairy flavours.

The Indian confectionery market includes sugar-boiled confectionery, hard-boiled candies, toffees and other sugar-based candies. Sugar boiled confectionery has penetrated an estimated 17% of the households only, suggesting a large potential for growth. Considering the 25% penetration in the urban market, the confectionery industry could hope to be in for more promising future. The total volume of the sugar-boiled confectionery market in the organized sector (comprising plain/ hard boiled candies, toffees, eclairs and gums) is around Rs. 23 bn. Add to this the unorganized sector and the market for all types of confectionery is of the order of Rs. 38 bn which increased by 15% over that of the preceding year. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE
CAPACITY

Hard Boiled Candy	: 18 MT/Day
Soft Candy	: 14 MT/Day
Plant & Machinery	: ₹ 547 Lakhs
Cost of Project	: ₹ 1060 Lakhs
Rate of Return	: 29%
Break Even Point	: 50%

Citric Acid Monohydrate

Citric acid monohydrate occurs as colourless crystals or as white, crystalline powder with a strongly acidic taste. It is efflorescent in dry air, very soluble in water, freely soluble in ethanol (96 %) and sparingly soluble in ether. Citric acid monohydrate is non-toxic and has a low reactivity. It is chemically stable if stored at ambient temperatures. Citric acid monohydrate is fully biodegradable and can be disposed of with regular waste or sewage. Citric acid (as either the monohydrate or anhydrous material) is widely used in pharmaceutical formulations and food products, primarily to adjust the pH of solutions.

PROJECT COST ESTIMATE
CAPACITY

Capacity	: 3,000 MT Per Annum
Plant & Machinery	: ₹ 1204 Lakhs
Cost of Project	: ₹ 2166 Lakhs
Rate of Return	: 27%
Break Even Point	: 47%

The citric acid market is valued in the year 2017 and anticipated to grow at a CAGR 3.5% of from 2018-2023. High demand for citric acid in food and beverages used as an additive to preserve food is expected to be the driver for the industry growth. The growing demand of citric acid in manufacturing of products such as diabetic baked products, ice creams and other low fat dairy products are increasing demands for products and is expected to boost the demand. Thus, due to demand it is best to invest in this project.

Tungsten Carbide Rod

Tungsten carbide (WC) is an inorganic chemical compound containing equal parts of tungsten and carbon atoms. In its most basic form, it is a fine gray powder, but it can be pressed and formed into shapes for use in industrial machinery, tools, abrasives, as well as. Tungsten carbide is approximately three times stiffer than steel, and is much denser than steel or titanium. It is comparable with corundum in hardness and can only be polished and finished with abrasives of superior hardness such as silicon carbide, cubic boron nitride.

PROJECT COST ESTIMATE
CAPACITY

Tungsten Carbide Rod	: 2 MT / Day
Plant & Machinery	: ₹ 119 Lakhs
Cost of Project	: ₹ 607 Lakhs
Rate of Return	: 31%
Break Even Point	: 59%

In India, investments of USD 31,650 billion has been proposed by 99 cities under their smart cities plan. 100 smart cities and 500 cities are likely to invite investments worth INR 2 trillion in the next 5 years. Housing for All" program, launched in June 2015 aims to build 20 million urban homes and 30 million rural houses by 2022. Around 60 million new homes are expected to be built in India "between" 2018-2024. Thus, the growing manufacturing activities are instrumental for the growth of cemented carbide which in turn, boosting the market for tungsten carbide during the forecast period.

The market for tungsten carbide is anticipated to grow at a moderate CAGR of over 3.5% during the forecast period. Growth in the manufacturing activities across the globe is generating demand for tungsten carbide. Tungsten carbide is highly dense material constituting of tungsten and carbide. This alloy is resistant to heat, rust, scratches, and pitting. As a whole any entrepreneur can venture in this project without risk and earn profit.

Aqua Fish Feed

Fish feed are placed in the middle of the aquaculture value chain. Raw materials of marine or land based origin are mixed with other important ingredients to feed pellets, which through their transformation in the fish are important for the final quality of the fresh fish or the processed fish products for the consumers. Fish farmers in India have increased access to high-quality feed this year, as Cargill has opened its first feed plant dedicated to fish species in the country .The plant, located in Vijayawada and acquired from Mulpuri Foods & Feeds, reflects the company's commitment to bring farmers safe, high-quality

aqua feed solutions, according to a press release. It marks an important step in Cargill's work to develop its aqua feed business in India and across Asia.

The India Aquaculture Feed Market was valued at USD 1.20 billion in 2017 and is expected to register a CAGR of 10.4% during the forecast period (2018-2023). India feed mills have the capacity to produce 2.88 million metric ton. Andhra Pradesh is the largest feed consuming state in India. The coastal line of the country is about 7,517 kilometers with 195.20 kilometers of river and canal systems. The country consists of 14 rivers, 44 medium rivers, and many small rivers. The country also has tanks and ponds. By these sources, it is clear that the aquaculture industry is huge in India which provides huge opportunity and potential for aquaculture feed industry. As a whole any entrepreneur can venture in this project without risk and earn profit.

PROJECT COST ESTIMATE

CAPACITY

Fish Feed	: 60 MT / Day
Prawn Feed	: 60 MT / Day
Plant & Machinery	: ₹ 845 Lakhs
Cost of Project	: ₹ 1702 Lakhs
Rate of Return	: 27%
Break Even Point	: 55%

Needles for Sewing and Embroidery Machine

A sewing needle, used for hand-sewing, is a long slender tool with a pointed tip at one end and a hole (or eye) at the other. The earliest needles were made of bone or wood; modern needles are manufactured from high carbon steel wire and are nickel- or 18K gold-plated for corrosion resistance. High quality embroidery needles are plated with two-thirds platinum and one-third titanium alloy. Traditionally, needles have been kept in needle books or needle cases which have become objects of adornment. Needles are offered in a wide range of sizes and the selection of needle size is based on the combination of fabric and sewing thread which is to be sewn. If the selected sewing needle is too small for the sewing thread size, the thread will not fit well into the long groove of the needle and will suffer from extreme abrasion.

The global sewing machines market is projected to grow at the rate of 4.1% during the forecast period, 2018 to 2023. The large scale adoption of these automated sewing machines for most apparel and non-apparel manufacturing contributes to the growth of the sewing machine market. Supporting government policies in emerging policies, like China and India, influence textile manufacturers to adopt the latest technologies and expand their manufacturing sites, is expected to increase the demand for industrial sewing machines. However, strong presence of unorganized players and uncertainty in raw material costs are restraining the growth of sewing machines market. As a whole any entrepreneur can venture in this project without risk and earn profit.

PROJECT COST ESTIMATE

CAPACITY

Sewing Needles (30 g each) per Pack 50 Pcs.	: 6,400 Packs / Day
Embroidery Needles (30 g each) per Pack 50 Pcs.	: 1,600 Packs / Day
Plant & Machinery	: ₹ 256 Lakhs
Cost of Project	: ₹ 939 Lakhs
Rate of Return	: 27%
Break Even Point	: 59%

Waste & Used Oil Recycling Plant

Waste oil is generated from industrial and non-industrial sources and primarily contains hydrocarbons. It may also contain additives and impurities due to physical contamination and chemical reactions occurring during its use.

Used oil has been used previously, and as a result of that, is now contaminated by impurities, either chemical or physical. Examples of used oil are old transmission oil, motor oil, brake fluid, hydraulic oil and gearbox oil. Used oil is a recyclable commodity, and as such, can be stored for recycling, reuse or disposal. Used oil is not considered to be a waste product. Re-refining of usedlube oil is an economically attractive recycling methodin terms of resources conservation and environment protection. It allows processing of hazardous material in a safe and effective way to recover a high quality base oil product.

The global lubricants market size is projected to reach USD 182.6 billion by 2025 from USD 157.6 billion in 2020, at a CAGR of 3.0%. Growth in Industrialization in Asia Pacific and the Middle East & Africa post COVID-19, coupled with the rise in process automation in most of the industries and the gradual increase in number of vehicles on-road are key factors expected to drive the global lubricants industry during the forecast period.

The enhanced properties of gear oils are required to improve the efficiency of the wind turbine; hence there is an increasing demand for synthetic gear oils in wind turbines. Power generation from wind energy is rising at a swift speed that is also demanding for installation of wind turbines. Wind turbines are fueling the demand for gear oils that are driving the Indian industrial lubricants market. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

CAPACITY

Used Lubricating Oil	: 7,600 Ltrs / Day
Spent Clay	: 800 Kgs / Day
Plant & Machinery	: ₹ 118 Lakhs
Cost of Project	: ₹ 664 Lakhs
Rate of Return	: 12%
Break Even Point	: 59%

Chlorinated Polyvinyl Chloride

CPVC is a high-temperature plastic pressure piping system introduced for potable plumbing in 1959. It has also been used extensively in fire sprinkler systems since 1985. This material is also used for many industrial and process piping applications. CPVC pipe is available in nominal sizes from 1/2" to 24" and is approved in all model plumbing and mechanical codes across the United States and Canada. In addition, CPVC pipe and fittings from select manufacturers are listed for light hazard fire sprinkler systems, as defined in NFPA 13, 13R and 13D standards. The demand for PVC in India witnessed an impressive CAGR in the historic years and is projected to achieve a healthy CAGR of over 6.81% during 2015-2030. The total capacity of PVC in India is around 1640 KTA with Reliance Industries holding maximum share in its production in comparison to the other four leading players. The domestic production of PVC is unable to consolidate the massive demand for the product hence; around 50 per cent of the demand in India is being met through imports.

However, chlorinated polyvinyl chloride products turns brittle after some time due to continuous exposure to hydrocarbon chemicals or losing the molecular bond in CPVC materials. It may create hassles for the product manufacturer. Additionally, there is problem of high maintenance of material in leak damage situations, which tends to affect product demand. This could play a setback for product demand over the forecast timeframe. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

CAPACITY

Chlorinated Polyvinyl Chloride	: 80 MT/ Day
Plant & Machinery	: ₹ 588 Lakhs
Cost of Project	: ₹ 2283 Lakhs
Rate of Return	: 28%
Break Even Point	: 49%

Gourmet Popcorns

Popcorn is a variety of corn kernel which expands and puffs up when heated; the same names are also used to refer to the foodstuff produced by the expansion. A popcorn kernels strong hull contains the seed's hard, starchy shell endosperm with 14–20% moisture, which turns to steam as the kernel is heated. Pressure from the steam continues to build until the hull ruptures, allowing the kernel to forcefully expand, from 20 to 50 times its original size, and then cool.

Popcorn is one of the six major types of corn, which includes dent corn, flint corn, pod corn, flour corn, and sweet corn. Each kernel of popcorn contains a certain amount of moisture and oil. Unlike most other grains, the outer hull of the popcorn kernel is both strong and impervious to moisture and the starch inside consists almost entirely of a hard type.

The global popcorn market is projected to reach $15billion by 2023, registering a CAGR of 7.6 percent from 2017 to 2023, with ready-to-eat leading the segment. While established FMCG businesses have either launched a popcorn product or are looking to launch one, startups too have built ready-to-eat or ready-to-cook popcorn brands in the domain. It would be futile to undermine the potential this industry has.

The future of India Snacks Market can be judged from the fact that this industry is expected to grow with double digit CAGR for the time frame of 2018 to 2024. India snacks market is dived between organized players and unorganized market. At present Unorganized market is dominating the India snacks market. But this scenario is expected to change during the forecast period of 2018-2024. India Snacks Market is growing due to following factors Lifestyle Changes, Rising Urbanization, Growing Middle Class Population, Local Availability and Availability of Snacks in Small Package Size, Low Price and Company's Strategies to focus on regional taste. Thus, due to demand it is best to invest in this project.

PROJECT COST ESTIMATE

CAPACITY

Gourmet Popcorns 50g Pack	: 4000 Packs / Day
Gourmet Popcorns 100g Pack	: 4000 Packs / Day
Gourmet Popcorns 150g Pack	: 4000 Packs / Day
Gourmet Popcorns 200g Pack	: 4000 Packs / Day
Plant & Machinery	: ₹ 38 Lakhs
Cost of Project	: ₹ 132 Lakhs
Rate of Return	: 36%
Break Even Point	: 61%

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MICR CODE	110240053

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Market Research Reports

While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/ line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product:

- Good Present/Future Demand
- Export-Import Market Potential
- Raw Material & Manpower Availability

The report provides an expansive market analysis by covering areas like: growth drivers, trends prevailing in the industry, Demand-Supply Situation, Foreign Trade, Porters 5 Forces Analysis, regulatory framework as well as comprehensive SWOT analysis of the sector.

The report further establishes the regulatory framework of the industry. It encapsulates the status of the current legislation in the industry as well as the recent changes and developments in the regulations. The report also provides key player profiles along with key financials and comparison. The market research report shares vital information like shareholding pattern, revenue mix, plant location and financial summary of the key companies.

The market forecasts are developed on the basis of:

- Secondary Research
- Surveys One-on-one Interactions Databases
- Industry Sources

It covers contact information of Present major players like address of registered office, key financials like plant location, raw material consumption and financial comparison covering balance sheet, profit & loss account and financial ratios. The report by its graphical representation and forecasts of key data indicators helps in analyzing the market potential by elaborating on various factors that will contribute to the consumption growth of products in India, import-export markets of the products as well as market size and outlook of the industry.

Scope & Coverage of Market Research Report are:

- Present Status (Indian & Global)
- Internal Market Analysis
- Outlook & Forecasts (5 Years)
- SWOT & Porters Analysis

We at NPCS, through our reliable expertise in the project consultancy and market research field, have identified different projects, which satisfies all the customer requirements and has high growth potential in the market. We help catalyze business growth by providing distinctive and profound market analysis. We use authentic & reliable sources to ensure business precision and through our report we aim to help you make sound and informed business decision. We have built a veritable reputation for our commitment to fulfilling our clients' exacting market research solutions. Our team of experts specializes in offering syndicated market research reports, customized research reports and consulting services at cutthroat prices.

Reasons for Buying Report:

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- Report provides analysis and in-depth financial comparison of major players/competitors.
- Report provides indispensable buyers data with their company financials as well as the contact details, which can be an important tool in identifying the target customers.
- The report provides forecasts of key parameters which helps to anticipate the industry performance.
- We use reliable sources of information and databases. And information from such sources is processed by us and included in the report.

List of Ready Available Reports:

1. India Active Pharmaceutical Ingredient (API) Market
2. Maize (Corn) Products in India (Starch, Glucose, Dextrose, Sorbitol)
3. Cold Chain Logistics in India (Cold Storage & Reefers)
4. Market Research Report on Milk Processing & Dairy Products
5. Market Research Report on Packaged Fruit Juices & Drinks
6. Market Research Report on Future Potential of Flexible Packaging
7. Medical Devices & Disposables Industry
8. India Natural Food Colour Market
9. Bakery Industry in India
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11. Market Research Report on Detergent Industry
12. Market Research Report on FEMININE HYGIENE PRODUCTS
13. Market Research Report on Future of Online Retailing in India
14. Market Research Report on Edible Oils in India
15. India Beer Market
16. Vacuum Blood Collection Tube Market
17. Aluminium Easy Open End

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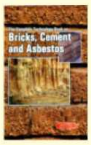

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Bricks, cement and asbestos have major role in building and road construction. The present book contains processes of different types of bricks making, cement manufacturing and production of asbestos. The book is very useful for new entrepreneurs, existing units, professionals, institutions related to building construction, research scholars etc. **₹1400 US$150**

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A man entering an industry soon finds that most of the products manufactured by his company are not synthetic or definite chemical compounds, but are mixtures, blends or highly complex compounds of which he knows little or nothing. The literature in this field, if any, may be meagre, scattered or antiquated. The purpose of publishing this book is to provide proper formulations of most consumable products. The book is very useful for chemists, new entrepreneurs, existing units, technocrats and engineering students. **₹1475 US$150**

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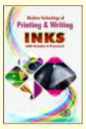
BOOKS ON INKS, GUMS & ADHESIVES, PAINTS, SURFACE COATING

Modern Technology of
Printing and Writing Inks (2nd Rev. Edn.)



The Printing and Writing Ink Industries have grown significantly during the last decade. Particularly printing ink industry is characterised by exceeding high margin profit. Having in view we have published this book which will be mile stone for the entrepreneurs, existing units, libraries etc. The book contains formulae, processes and other related information of various printing and writing inks. **₹1475 US$150**

The Complete Technology Book on
Printing Inks

The beginning of ink making are something of a mystery. It is certain however, that the development of the art of writing proceeded the invention of a ink by almost a thousand years. Prior to the invention of ink the ancients wrote with a pointed metal stylus on tablets of stone and clay. In this book an attempt has been made to bring together the useful manner as possible the fundamental Principles of ink making. The book contains formulae, processes and other relevant information of the manufacturing of different types of printing inks. **₹1000 US$1000**

The Complete Book on
Resins

(Alkyd, Amino, Phenolic, Polyurethane Epoxy, Silicone, Acrylic),
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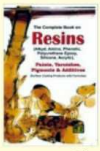
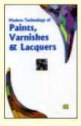


This handbook covers all aspects of coating technology including composition, preparation, application, manufacturing process and photographs of plant & machinery with supplier's contact details. The major contents of the book are oleoresinous media, varnishes: composition, manufacture & use, alkyd resin technology, manufacture of alkyd resins, polyesters, amino resins, phenolic resins, polyurethane resins, epoxy resins, silicone resins, acrylic solution resins, emulsion polymerization theory, emulsion polymers, water reducible resins, water soluble polymers, solvents, inorganic pigments, titanium dioxide pigments, organic pigments, paint driers and architectural paints etc. **₹1995 US$150**

Handbook on
Speciality Gums, Adhesives, Oils, Rosin & Derivatives, Resins, Oleoresins, Katha, Chemicals with other Natural Products

The forest in India yields a large number of products, which play an important role in the economy of the country. This book contains processes of forest based products like Gums, Resins, Oleoresins, Essential Oils and other natural products obtained from Indian forests. It gives an insight of richness and vastness of the forest wealth. **₹1275 US$125**



Modern Technology of
PAINTS VARNISHES & LACQUERS

Surface coating industry is one of the most popular industries. Paints, Varnishes and lacquers industry is gaining ground at a rapid pace in modern time accompanied with closed advance in surface coating technology. The book deals with fundamentals of paints, varnishes and lacquers, pigments, oils used in paints and varnishes, solvents, driers, related plasticizers, additives for surface coating, various types of paints manufacturing etc. **₹1075 US$125**

Gums, Adhesives & Sealants Technology
With Formulae & Their Applications (2nd Rev. Edn.)

Gums, Adhesives and Sealants are occupying by and large a conspicuous plateau in the modern industrial world by virtue of their versatility in diverse fields of applications. This potentially useful book furishes technical aspects of various types of gums, adhesives and sealants which are so useful to a new entrepreneurs or established one. The book delineates in detail formulae, processes of various gums, adhesives and sealants along with addresses of machinery and raw material suppliers. **₹1475 US$150**

Adhesives Formulary Hand Book

Adhesives have so importance and are extensively attached to our infrastructure that we cannot isolate in from out daily needs. From school going children to housewives to jet manufactures to Atomic Explosion, every where adhesives plays a very important role. **₹1275 US$125**

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Painting is older than writing. It began twenty thousand years ago when the Stone Age man drew pictures with earth colours on the walls of caves in northern Spain and southern France. Now a days paints play a critical role in preening corrosion and enhancing aesthetic values in various segments such as architectural household applications, automobiles, industrial equipments, ships, aircrafts etc. The present book covers the various formulae and processes of paints, pigments, varnishes and enamels.

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