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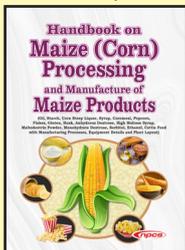
## About Us

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

## Handbook on Maize (Corn) Processing and Manufacture of Maize Products

(Oil, Starch, Corn Steep Liquor, Syrup, Cornmeal, Popcorn, Flakes, Gluten, Husk, Anhydrous Dextrose, High Maltose Syrup, Maltodextrin Powder, Monohydrate Dextrose, Sorbitol, Ethanol, Cattle Feed with Manufacturing Processes, Equipment Details and Plant Layout)

₹1895/- \$150-



In India, maize is becoming third most significant crop. Its significance stems from the fact that it is utilised not only for human food and animal feed, but also for corn starch manufacturing, corn oil production, and the generation of baby corns. Additionally, maize stover, the leaves and stalk of the maize plant, is used for forage, biofuel production, and chemical production.

Corn is also processed into a multitude of food and industrial products including:-

- Corn Starch is a yellow powder made from finely ground, dried corn, while cornstarch is a fine, white powder made from the starchy part of a corn kernel.
- High fructose corn syrup (HFCS) is a sweetener derived from corn syrup, which is processed from corn.
- Corn oil contains some healthy components like vitamin E and phytosterols, but overall it's not considered a healthy fat.
- Corn ethanol is produced from corn biomass and is the main source of ethanol fuel, mandated to be blended

with gasoline in the Renewable Fuel Standard.

- Some strains of corn (*Zea mays*) are cultivated specifically as popping corns.
- Dextrose Anhydrous can be used as sweetener in baked goods, candies, gums, dairy products like some ice-creams and frozen yogurts, canned foods, cured meats etc.
- Maltose is a sugar that tastes less sweet than table sugar. It contains no fructose and is used as a substitute for high-fructose corn syrup.
- Maltodextrin is a white powder made from corn. To make it, first the starches are cooked, and then acids or enzymes such as heat-stable bacterial alpha-amylase are added to break it down further.
- Dextrose is the name of a simple sugar made from corn that's chemically identical to glucose, or blood sugar.
- Sorbitol, or glucitol as it is sometimes called, is a slow-metabolizing sugar alcohol derived from fruits, corn and seaweed.

The global maize market is expected to grow at a CAGR of 3.8%. The factors that affect the demand for starch mainly include population growth and industrial development of a country; specifically the food and beverage, textiles, paper and printing, pharmaceuticals and other health and beauty products, and adhesives.

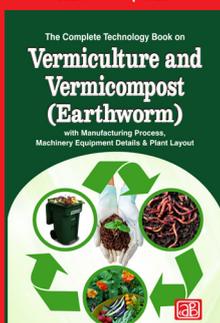
The demand for high-fructose corn syrup (HFCS) sweeteners across the country is majorly due to its wide usage in the confectionery, bakery, and beverage industries, especially soft drink manufacturing. Rising health awareness among consumers has resulted into increasing preference for corn oil due to its health benefits. More ethanol production means more demand for corn. According to the most recent statistics released by the U.S. Department of Agriculture, 35%, or 5.25 billion bushels, of the projected 15.062 billion bushels of corn harvested will be processed into ethanol.

The book covers a wide range of topics connected to Maize Products, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipments.

A complete guide on Maize (Corn) Processing and Manufacture of Maize Products manufacture and entrepreneurship. This book serves as a one-stop shop for everything you need to know about the Maize manufacturing industry, which is ripe with opportunity for manufacturers, merchants, and entrepreneurs. This is the only book that covers Maize (Corn) Processing and Manufacture of Maize Products in depth. From concept through equipment procurement, it is a veritable feast of how-to information.

## The Complete Technology Book on Vermiculture and Vermicompost (Earthworm) with Manufacturing Process, Machinery Equipment Details & Plant Layout (2nd Revised Edition)

₹1275/- \$125-



Advantage of vermicomposting is that it composts the wastes of rural areas. They clean our villages by using unnecessary organic and non-organic materials. Improves the texture of the soil and its ability to store water. Improves root growth and the multiplication of beneficial soil microorganisms by providing optimum aeration to the soil.

Vermicompost (vermi-compost) is a mixture of decomposing vegetable or food waste, bedding materials, and vermicast created by the decomposition process using various species of worms, usually red wigglers, white worms, and other earthworms. This is known as vermicomposting, and the practise of raising worms for this purpose is known as vermiculture. Sewage treatment can also be

done with vermicomposting.

The Global Vermicompost Market is reach growing at a CAGR of 16.74%. The Growth of the global vermicompost market is caused by various factors, such as improved soil aeration, improved water holding capacity, better nutrient cycle, and enriched soil with micro-organisms, helps in plant root growth and structure, enhanced germination. The vermicomposting method is used in organic farming. Increasing the use of sustainable agricultural practices, such as vermicomposting along with Government support for organic farming is significantly contributing to the global vermicompost market growth. Vermicompost offers plants with necessary nutrients and helps in plant diseases suppression. Worm castings

often comprise 7 times more phosphorus, 11 times more potassium, and 5 times more nitrogen than ordinary soil, which are crucial minerals required for plant growth.

Vermiculture and Vermicompost (Earthworm), as well as their manufacturing methods, are all covered in depth in this book. It also offers photos of equipment as well as contact information for industrial providers.

This book is a one-stop shop for everything you need to know about the Vermiculture and Vermicompost (Earthworm) industry, which is ripe for manufacturers, merchants, and entrepreneurs. This is the only book that goes into great detail about Vermiculture and Vermicompost. It's a genuine feast of how-to material, from concept to equipment buying.

## Project Report on Decortication & Packing of Peanut

If you work in the food sector, especially if you deal with peanuts, you've probably heard the term Decortication and Packing of Peanuts. Simply said, it comprises removing the outer skin of the peanut and packing it before to shipping or selling it to customers. What does it mean, though, to decorticate peanuts? What does the term "decortication" mean? Before hulling, peanuts have their skins removed. They're roasted after that. The roasting kills the microorganisms that live naturally on peanut shells, keeping the oils from becoming rancid.

After roasting, peanuts are shelled again to remove any remaining shell fragments. This treatment also gets rid of any minute shell fragments that were missed during the decortication process (this can happen if a peanut gets slightly crushed during shelling). Finally, the decorated nuts are pulverised into a fine powder for use in products like peanut butter and protein powders.

India is the world's second-

largest producer of groundnuts. Indian groundnuts come in three varieties: Bold or Runner, Java or Spanish, and Red Natal. Kadiri-2, Kadiri-3, BG-1, BG-2, Kuber, GAUG-1, GAUG-10, PG-1, T-28, T-64, Chandra, Chitra,

### PROJECT COST ESTIMATE

Capacity:

Peanuts (50 Kgs each Bag)	: 400 Bags Per Day
Plant & Machinery	: ₹ 30 Lakhs
Cost of Project	: ₹ 534 Lakhs
Rate of Return	: 30%
Break Even Point	: 53%

Kaushal, Parkash, Amber, and others are the most commonly planted groundnut cultivars in India.

Peanuts are the most extensively utilised crop in the food sector, and they may be found in a wide range of products. The peanut market is estimated to increase at a CAGR of 4.5 percent from 2021 to 2026. Peanut markets are advantageous for manufacturing a variety of peanut oils, dry roasted peanuts, and snacks that can be consumed directly or indirectly.

## Readymade Khaini (Chewing Tobacco) Manufacturing Business

Khaini is a type of chewing tobacco made with tobacco, lime, and spices. It is used as an oral snuff in India and Pakistan, with the states of Karnataka, Kerala, and Tamil Nadu having the highest consumption rates. It is also used in some parts of Sri Lanka and other parts of Southeast Asia. It has gained popularity in recent years in parts of Africa, where it is frequently sold as a low-cost substitute for cigarettes or chewing tobacco, or as a chewing gum after smoking marijuana or khat leaves.

The Smokeless Tobacco Market is predicted to reach USD 23.20 billion in the next five years, with a CAGR of 4.41 percent. Tobacco and tobacco-related products have been around since at least 6,000 BC. Since then, the Nicotiana Tabacum plant has gone from a necessity to a critical commodity to the centre of national debate. Over the years, several tobacco varieties have been introduced to the market, one of which being smokeless tobacco.

India has the largest SLT market in the world. SLT has grown at an exponential rate in India over the last two decades, particularly in the unorganised sector. SLT cultivars account for nearly a fifth of total tobacco production and 14 percent of all tobacco-growing acreage.

### PROJECT COST ESTIMATE

Capacity:

Readymade Khaini (Packed in 10 gms Pouches size)	: 200,000 Pouches Per Day
Plant & Machinery	: ₹ 40 Lakhs
Cost of Project	: ₹ 360 Lakhs
Rate of Return	: 35%
Break Even Point	: 53%

The cumulative tax rate on all SLT commodities is 76 percent.

India is the second-largest tobacco producer in the world and the third-largest exporter. The tobacco industry employs a total of 46 million people worldwide. The market experienced a total (made and unmanufactured tobacco) export of INR 60.84 billion in FY 2018 because to the Tobacco Board of India's expanding facilities.

## Setting up a Multispeciality Hospital (200 Bedded)

A hospital is a health care institution providing patient treatment with specialized medical and nursing staff and medical equipment. The best-known type of hospital is the Multispeciality hospital, which typically has an emergency department to treat urgent health problems ranging from fire and accident victims to a sudden illness.

A Multi-speciality hospital as a health care organization has been defined in varied terms as an institution involved in preventive, curative/ameliorative, palliative or rehabilitative services. It is meant to treat patients suffering from various ailments. A private hospital is a place where one may get treatment from ordinary fever to a major surgery operation.

Global Hospital Market stood

at USD 4207.46 billion in 2020 and is expected to grow at a CAGR of 6.70% during the upcoming period. This can be attributed to the growing geriatric population suffering from various chronic diseases including

### PROJECT COST ESTIMATE

Capacity	: 200 Bedded Hospital
Plant & Machinery	: ₹ 140 Cr
Cost of Project	: ₹ 212.48 Cr
Rate of Return	: 27%
Break Even Point	: 50%

cancer, diabetes, cardiovascular diseases, renal disorders, among others. This in turn has increased the patient pool requiring treatment. Furthermore, increasing awareness and advancements pertaining to diagnostic technologies are expected to create lucrative opportunities for the market growth through 2026.

## Profitable Business of Calcium Sennoside from Senna Leaves

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

The Associated Chambers of Commerce and Industry of India (ASSOCHAM) has projected that the market size of herbal industry which is currently estimated at Rs.7,500 crores will be double to levels at Rs. 15,000 crore by 2022 as this

industry would be growing at a compounded annual growth rate of over 20% henceforth.

Interestingly both raw materials (herbs) and herbal products have ready market globally. Releasing the study, ASSOCHAM Secretary General, D.S. Rawat said that ideally, the niche market that India can focus on include

### PROJECT COST ESTIMATE

Capacity:

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

Ayurvedic Medicines and Dietary Supplements (including health drinks), extracts, Oils and other derivatives, skincare and beauty aids.

## IV Cannula and Catheters Manufacturing Plant

Although the names cannula and catheter can be used to separate them, the activities of an IV catheter and a cannula are fairly similar. A cannula is more flexible, with a tapered diameter that allows it to be placed into veins of various sizes. A catheter can only be inserted into larger veins since it is less flexible and cannot be tapered. Although each device has its own set of capabilities, they all have the same goal: to administer fluids or medications directly into the bloodstream through an intravenous line.

### PROJECT COST ESTIMATE

**Capacity:**

**IV Cannula with Wings & with Injection Port** : 75,000 Pcs. Per Day

**Catheters** : 18,750 Pcs. Per Day

**Plant & Machinery** : ₹ 16 Cr

**Cost of Project** : ₹ 27 Cr

**Rate of Return** : 28%

**Break Even Point** : 55%

The most frequent way for administering intravenous fluids, medicines, and nutritional supplements in the hospital or at home is with an IV catheter and cannula, sometimes known as an IV set or line. Fluids that are injected directly into your vein rather than into your muscles or soft tissues are referred to as intravenous (IV). A catheter and a cannula are used to make an IV set, also known as a line.

You might need one if you're getting chemotherapy or are about to have surgery that requires general anaesthetic. A cannula is normally inserted into one of three veins: the one just below the elbow in either arm, the neck vein, or the vein at the collarbone vein. One of the key factors driving the global expansion of the IV catheter market is the growing importance of intravenous (IV) therapy. IV therapy is an important part of the treatment of a variety of disorders, and it is used in both surgical and non-surgical patients. Another major factor driving the global IV catheter market is the rising number of chronic disease cases around the world.

## Pre-Feasibility Report on Liquor from Mahua Flowers

Mahua liquor is an alcoholic beverage derived from the mahua flower, also known as mahuaa or mahuwa, which grows prolifically in eastern India, Nepal, and Bangladesh. In most cases, it has an alcoholic content of 11% by volume, but much higher

levels are occasionally produced illegally in rural regions. Fresh flowers are frequently added to unfermented rice beer that has had the yeast removed to make mahua liquor, which is a moderately alcoholic beverage

### PROJECT COST ESTIMATE

**Capacity:**

**Liquor (750 ml Size)** : 667 Bottles Per Day

**Liquor (375 ml Size)** : 1,334 Bottles Per Day

**Liquor (180 ml Size)** : 2,778 Bottles Per Day

**Plant & Machinery** : ₹ 220 Lakhs

**Cost of Project** : ₹ 500 Lakhs

**Rate of Return** : 33%

**Break Even Point** : 57%

known as Mahua suraa. To manufacture mahua liquor, the suraa is distilled.

According to the Indian Council for Research on International Economic Relations (ICRIER), India is one of the

world's fastest growing alcoholic beverage markets, with a market worth \$52.5 billion (about Rs 3.9 lakh crore). The market is predicted to grow at a 6.8% CAGR till 2023, according to the research. Almost 15 lakh people work in the industry.

Due to a growing trend toward alcohol consumption and an increase in the number of pubs and bars around the world, the market is expected to grow over the forecast period. In addition, the increased number of women who consume alcohol is predicted to boost the industry's growth.

## Business Plan on

## Hexamethoxymethyl Melamine Resin (HMMM)

The chemical family of melamine resins includes hexamethoxymethyl melamine resin (HMMM). It's commonly used in glues and adhesives, textile treatments, and a range of wood finishing products due to its remarkable water resistance, hardness, and corrosion resistance. Hexamethoxymethyl Melamine Resin (HMMM) is a polyfunctional resin with good alkali, acid, and heat resistance. It is also known as melamine formaldehyde resin, melamine formal resin, or melamine resin.

Hexamethyl methoxy melamine is a common industrial

### PROJECT COST ESTIMATE

**Capacity** : 8 MT Per Day

**Plant & Machinery** : ₹ 280 Lakhs

**Cost of Project** : ₹ 745 Lakhs

**Rate of Return** : 26%

**Break Even Point** : 56%

chemical used as a filler and crosslinking agent. HMMM-containing coatings and polymers are employed in the production of coils, cans, and vehicles. It's utilised in conjunction with novolac resin and resorcinol as a crosslinking agent. Because of

its lesser toxicity and less effect on scorch times, hexamethyl methoxy melamine is recommended as a substitute for hexamethylene-tetramine.

Because of the increased usage of fillers and additives in the paints and coatings sector, Asia Pacific is likely to be the fastest expanding region in the hexamethyl methoxy melamine market throughout the forecast period. The paints and coatings sector earned US\$ 3.6 billion in 2011 and is predicted to grow to US\$ 8.2 billion by 2017, according to the India Brand Equity Foundation.

## Start Flexographic Ink

### (for Milk Pouches, Soap Covers, Woven Sacks & Jute Bags) Manufacturing Business

For milk pouches, soap wraps, woven sacks, and jute bags, flexographic ink, also known as Flexo Ink, is a common printing medium. Flexographic ink is made comprised of an inorganic pigment and an organic solvent that allows it to be diluted with a carrier and then applied as a wet film with many colours to print the image on the product or container in question. Flexographic ink is distinguished from other printing processes like offset and screen printing by its use of much thinner coatings.

Flexographic ink is used on milk pouches, soap covers, woven sacks, and jute bags to aid with product identification. Graphics can be printed on flat surfaces such as milk pouches or soap covers using flexographic printing, and the images cannot

be transferred once printed. Consumers prefer it to other printing methods such as screen printing since the ink must be non-toxic and should not alter the product's attractiveness or make it less appealing than before.

The flexographic ink market is anticipated to reach over \$5 billion by 2025, after growing at a CAGR of 5% from 2020 to 2025. Coated and uncoated paper materials, as well as non-porous substrates such as metallized and paper foils, and plastic films, are all printed using flexographic ink. Flexographic inks adhere well to the surface of the substrate and produce high-quality printing regardless of the substrate material.

The growing need for flexographic ink in the packaging industry pulls the market forward.

Furthermore, the flexographic ink industry is being boosted by increased demand for UV curable ink. Furthermore, the industry is being propelled ahead by rising demand for environmentally friendly inks such as Water-Based Flexographic Ink.

### PROJECT COST ESTIMATE

**Capacity:**

**R Non-Absorbent Substrate Flexographic Ink** : 160 Kgs Per Day

**R Absorbent Substrate Flexographic Ink** : 160 Kgs Per Day

**Plant & Machinery** : ₹ 47 Lakhs

**Cost of Project** : ₹ 64 Lakhs

**Rate of Return** : 27%

**Break Even Point** : 55%

## Setup E-Waste Recycling Plant

Electronic wastes are superfluous, obsolete, damaged, or abandoned electrical or electronic devices, sometimes known as "e-waste," "e-scrap," or "Waste Electrical and Electronic Equipment," or "WEEE." Any component that is dropped, disposed of, or discarded rather than repurposed is considered electronic "waste," which includes leftovers from reuse and recycling activities. Because a wide range of surplus electronics (good, recyclable, and non-recyclable) are delivered on a daily basis, some public policy activists refer to all surplus electronics as "e-waste."

### PROJECT COST ESTIMATE

<b>Capacity:</b>	
<b>Plastic</b>	: 1.28 MT Per Day
<b>Ferrous Material</b>	: 0.80 MT Per Day
<b>Aluminium</b>	: 0.56 MT Per Day
<b>Glass</b>	: 0.80 MT Per Day
<b>Copper</b>	: 0.56 MT Per Day
<b>Plant &amp; Machinery</b>	: ₹ 87 Lakhs
<b>Cost of Project</b>	: ₹ 371 Lakhs
<b>Rate of Return</b>	: 27%
<b>Break Even Point</b>	: 62%

In a narrower sense, end-of-life information and telecommunications equipment, as well as consumer products, are sometimes referred to as e-waste. WEEE, on the other hand, is a subset of electronic waste (Waste Electrical and Electronic Equipment).

The global WEEE recycling market is expected to be valued \$3,854.5 million in 2020, up 3.7 percent from the previous year. During the year, a rise in environmental consciousness and commitment from leading technology businesses and electronic manufacturers to use sustainable manufacturing and supply chain practises boosted the expansion of recyclers. Over the next five years, companies across a number of EEE product sectors are expected to adopt circular electronics as part of their long-term vision and strategy. The global e-waste management market was worth \$49,880 million in 2020, and is predicted to increase at a 14.3% CAGR from 2021 to 2028, reaching \$143,870 million by 2028.

## Detailed Project Report on Cellulosic Cellophane Film

CNF (cellulosic cellophane film) is an environmentally friendly alternative to typical plastic bags and wraps for packaging and storing food in your home or business. If you're curious about cellulosic cellophane film and how it can benefit you, keep reading to learn more about what it's made of, how it compares to other packaging materials, and how it can help you save money at your home or office.

In the food, healthcare, and manufacturing industries, cellulosic cellophane film is widely used to cover and package products. We'll compare this content to other popular films in each of these uses

### PROJECT COST ESTIMATE

<b>Capacity</b>	: 6 MT Per Day
<b>Plant &amp; Machinery</b>	: ₹ 310 Lakhs
<b>Cost of Project</b>	: ₹ 681 Lakhs
<b>Rate of Return</b>	: 22%
<b>Break Even Point</b>	: 60%

in the next section of this essay. The Cellulose Film Packaging Market is predicted to increase at a CAGR of 5.1 percent over the next five years. Many global firms are concentrating their efforts on developing novel cellulose film packaging products. Furthermore, cellulose film packaging is occasionally employed in the food and beverage business due to its

numerous advantages. The rapid growth of the cellulose film packaging market is fueled by the discovery of new uses for cellulose film packaging derivatives on a regular basis. Due to increased demand for biodegradable and compostable packaging, the worldwide cellulose film packaging business is now seeing substantial growth.

Due to growing cellulose film packaging utilisation due to its biodegradable nature, North America, as an industrialised and environmentally concerned region, is likely to witness considerable growth in the cellulose film packaging market.

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

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

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

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

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

The global a2 milk market was worth \$1,129.7 million in 2019 and is expected to grow to \$3,699.2 million by 2027, with a CAGR of 15.8% from 2021 to 2027. The liquid a2 milk segment held the largest proportion of the market in 2019. A2 milk is a type of cow's milk

that includes mostly a2 beta casein protein and is free of a1 beta casein protein. It comes from cows of specific breeds like as Guernsey, Jersey, Holstein, Brown Swiss, and others.

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

### PROJECT COST ESTIMATE

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

## Production Business of Zinc Sulphate

Zinc sulphate is a very water soluble, transparent, colorless, crystalline compound. It is commonly used as the heptahydrate, ZnSO<sub>4</sub> • 7H<sub>2</sub>O, and is commonly called white vitriol; it occurs naturally as the mineral goslarite, and can be prepared by reacting zinc with sulfuric acid. It is used to supply zinc in animal feeds, fertilizers, and agricultural sprays; in making lithopone; in coagulation baths for rayon; in electrolyte for zinc plating; as a mordant in dyeing; as a preservative for skins and leather; and in medicine as an astringent and emetic.

### PROJECT COST ESTIMATE

<b>Capacity:</b>	
<b>Zinc Sulphate 33%</b>	: 2 MT Per Day
<b>Zinc Sulphate 21%</b>	: 2 MT Per Day
<b>Zinc Sulphate 12% Soln.</b>	: 2 MT Per Day
<b>Plant &amp; Machinery</b>	: ₹ 1.21 Cr
<b>Cost of Project</b>	: ₹ 3.70 Cr
<b>Rate of Return</b>	: 22%
<b>Break Even Point</b>	: 60%

Global Zinc Sulfate Market is valued to grow at healthy CAGR of 4.2% over in period 2020-2026. Increasing usage as a fertilizer additive in agricultural industry to prevent and correct zinc deficiency in crops, rising demand of applications of raw material for manufacturing latex products and usage as a herbicide for moss control are the key factors driving the market. Zinc sulfate plays a prominent role in treating zinc deficiencies in humans and is used as a fertilizer for agricultural sprays to improve soil nutrient which is expected to play a crucial role in the market development.

## Start Automated Vehicle Scrapping and Recycling Unit Business

Vehicles that are no longer roadworthy are scrapped, deconstructed, crushed, and recycled with the help of automated scrapping and recycling machinery. They're frequently made to order by bespoke manufacturers and rented out to companies who don't have the capacity to develop their own.

The deconstruction of automobiles for spare parts is known as vehicle recycling. Vehicles have value as a source of replacement components as they reach the end of their useful lives, which has given rise to the car dismantling industry. Commercial outlets in the business are often referred to as "wrecking yards," "auto dismantling yards," "vehicle replacement parts providers," and, more recently, "auto or vehicle recycling."

India, being the world's third-largest steel production, has tremendous auto-recycling potential. Auto recycling in India can give a host of benefits to the country, ranging from a boost to the automotive sector to fuel savings and employment development, due to the fact that it is largely unorganized. The recycling industry is betting big on the government's efforts. Based on 25% (7 million vehicles) of all automobiles that could be discarded, it is anticipated to generate business worth USD 2.9 billion (approximately INR 190 billion) at first. These figures are expected to climb in the coming years.

### PROJECT COST ESTIMATE

<b>Capacity:</b>	
<i>Spare Parts</i>	: 375 Units Per Day
<i>Waste Oil</i>	: 450 Units Per Day
<i>Waste Tyre</i>	: 2250 Units Per Day
<i>Engines</i>	: 50 Units Per Day
<i>Steel Scrap</i>	: 60000 Units Per Day
<i>Rubber Scrap</i>	: 200 Units Per Day
<i>Alloy Wheel</i>	: 250 Units Per Day
<i>Battery</i>	: 1,500 Units Per Day
<b>Plant &amp; Machinery</b>	: ₹ 10 Cr
<b>Cost of Project</b>	: ₹ 51 Cr
<b>Rate of Return</b>	: 32%
<b>Break Even Point</b>	: 36%

## Manufacturing Business of Surgical Sutures (Assembling)

Surgical sutures are used to keep incisions closed after an operation is completed, and they are normally removed by the surgeon several days later. Sutures can be used in a variety of methods to heal internal organs, but this article will focus on surgical sutures used in hernia repair and other abdominal surgeries. A surgical suture is a medical device that holds human tissues together following surgery or an accident. Sutures are frequently made of thread-like materials such as natural or synthetic fibres, metal wire, silk, or monofilament polyglactin (e.g., polyglycolic acid) (PGA). Surgical sutures are held in place via knotting or tissue glue.

Sutures are manufactured from both man-made and natural materials. Natural suture materials include silk, linen, and catgut, which is dried and processed intestine from a cow or sheep. Synthetic sutures are made from a variety of textiles, such as nylon or polyester that were created expressly for surgical use. Resorbable synthetic sutures are made from polyglycolic acid or other glycolide polymers. Dexon and Vicryl are two popular brand names for synthetic suture materials. Surgical sutures are made of Goretex, which is a water-resistant material, while other sutures are made of thin metal wire.

From 2022 to 2028, the Surgical Sutures Market Size is predicted to grow significantly due to the introduction of new surgical procedures and an increase in the number of surgeries. This is mostly due to an increase in the number of trauma and accident incidences occurring around the world. Over 1.3 million people die each year in traffic accidents, according to the World Health Organization (WHO), while nearly 20 to 50 million others get non-fatal injuries.

### PROJECT COST ESTIMATE

<b>Capacity</b>	: 250 Boxes Per Day
<b>Plant &amp; Machinery</b>	: ₹ 82 Lakhs
<b>Cost of Project</b>	: ₹ 313 Lakhs
<b>Rate of Return</b>	: 26%
<b>Break Even Point</b>	: 52%

## Start Trading Business

### (Potato Powder, Onion Powder, Capsicum Powder, Ginger Powder and Curcumin Powder)

Trade is a basic economic concept involving the buying and selling of goods and services, with compensation paid by a buyer to a seller, or the exchange of goods or services between parties. Trade can take place within an economy between producers and consumers. International trade allows countries to expand markets for both goods and services that otherwise may not have been available. As a result of international trade, the market contains greater competition and therefore, more competitive prices, which brings a cheaper product home to the consumer.

Potatoes are the fourth most cultivated crop after wheat, rice and corn. They produce the highest amount of starch derived per hectare of crop grown, which is 6.5 tons! There are various varieties of potatoes but those that have a high starch content are preferred for this purpose. Such potatoes are very good for protection against colon cancer and are very slowly digested. Powder from potatoes is a gluten-free starch powder extracted from potatoes.

Onions are abundantly cultivated and used around the world. Onion powder is made from ground dehydrated onions, grown by 'working with nature' using no chemical pesticides, herbicides or artificial fertilisers. It has a concentrated onion flavour that can be used in a wide range of dishes, making it an absolute essential in the kitchen. Because of its rich concentration of nutrients, onion powder offers many health benefits, including 10% or more of your required daily intake of vitamin C, vitamin B6 and manganese.

Capsicum is the genus of pepper plants, which includes sweet peppers such as bell peppers. These peppers are a part of the nightshade family along

with eggplant, potatoes and tomatoes. This vegetable is native to the Americas but is produced and used worldwide in international cuisines and as natural remedies.

Ginger is one of the healthiest spices, full of nutrients and bioactive compounds that have many benefits for our body and brain. Dry ginger powder or shunthichurna is a warm spice with pungent taste, extracted from the dried ginger roots. It helps to pacify Vata and Kaphados has and increases Pitta dosha.

### PROJECT COST ESTIMATE

<b>Capacity:</b>	
<i>Potato Powder</i>	: 40 Kgs. Per Day
<i>Capsicum Powder</i>	: 40 Kgs. Per Day
<i>Curcumin Powder</i>	: 40 Kgs. Per Day
<i>Ginger Powder</i>	: 40 Kgs. Per Day
<i>Onion Powder</i>	: 40 Kgs. Per Day
<b>Plant &amp; Machinery</b>	: ₹ 1 Lakhs
<b>Cost of Project</b>	: ₹ 27 Lakhs
<b>Rate of Return</b>	: 30%
<b>Break Even Point</b>	: 77%

Curcumin is the main biologically active phytochemical compound of Turmeric. It is extracted, concentrated, standardized and researched. Curcumin, which gives the yellow color to turmeric, was first isolated almost two centuries ago, and its structure as diferuloylmethane was determined in 1910. Extensive research within the last half a century has proven that its renowned range of medicinal properties, once associated with Turmeric, is due to Curcumin.

## Manufacturing Business of Blood Collection Tubes (Vacutainer)

A vacuum blood collection tube is a sterile glass or plastic test tube that uses a stopper to create a vacuum seal inside the tube and enable the depiction of a predetermined volume of liquid. The vacuum blood collection tube prevents needle stick damage by preventing needles from coming in human contact and thus, contamination. The vacuum blood collection tube contains a double pointed needle, attached to a plastic tubular adapter. Double pointed needles are available in many gauge sizes. Vacuum blood collection tubes may contain additional constituents which are used to preserve blood for treatment in a medical laboratory.

A vacuum blood collection tube is mostly used by clinics and laboratories for storing blood for future testing. Vacuum blood collection tubes

PROJECT COST ESTIMATE	
<b>Capacity:</b>	
<i>Blood Collection Tubes (Vacutainer) : 100,000 Nos. Per Day 13x100 with EDTA</i>	
<i>Blood Collection Tubes (Vacutainer) : 100,000 Nos. Per Day 13x75 Plain</i>	
<b>Plant &amp; Machinery</b>	: ₹ 345 Lakhs
<b>Cost of Project</b>	: ₹ 983 Lakhs
<b>Rate of Return</b>	: 30%
<b>Break Even Point</b>	: 51%

have a substitute which can preserve blood for an extended period for testing processes. Vacuum blood collection tubes are available in different types of sizes and specimens. Blood collection tubes expire because over time the vacuum is lost and blood will not be drawn into the tube when the needle punctures the cap.

Blood Collection Tubes Market size is estimated to reach \$2.81bn by 2025, growing at a CAGR of 7.1% during the period 2020-2025.

Blood plays an important role in the diagnosis and treatment of many diseases. The blood processing includes the collection, storing and managing the blood after collected from the donor. The blood collection tubes which are also known as vacutainers are made of either plastic or glass, these tubes are sterilized and have a safety-engineered stopper with different labeling options with the volume on it and color of the caps indicates the additives in the tube.

## Start Investing in Dairy Farming & Dairy Products (Milk, Butter, Ghee, Paneer & Curd)

Dairy farming is a type of agriculture that involves the long-term production of milk that is then processed and sold as a dairy product. Small/marginal farmers and agricultural labourers rely on dairying for supplemental income. Agriculture provides roughly 33 percent of India's gross domestic product, and agriculture employs 66 percent of the country's economically active people. Livestock products are anticipated to account for 21% of the total agriculture industry.

India produces the most milk in the world and is the major exporter of skimmed milk powder, but it exports very few additional milk products. India may become a net importer of dairy goods in the future due to rising domestic demand for dairy products and a substantial demand-supply gap.

Milk is defined as the whole, fresh, clean lacteal secretion obtained by complete milking of one or more healthy milch animals, excluding milk obtained within 15 days before and 3 days after calving or such periods as may be necessary to render the milk practically colostrum-free and containing the minimum prescribed percentage of milk fats and S-N-F.

Butter is a dairy product created from the solid parts of milk (fat and protein). One of the most concentrated forms of fluid milk is butter. To make one kilogramme of butter, you'll need twenty litres of whole milk.

Ghee is a sort of clarified butter made mostly from cow's milk. Because the water and milk solids have been removed, it is higher in fat than butter. When opposed to butter, ghee has a greater smoke point, thus it doesn't burn as quickly.

Paneer is a popular Indian indigenous dairy product that is akin to an unripe Ned kind of soft cheese that is used in a range of culinary meals and snacks.

Curd is a solid rather than a liquid product. Proteins make up a large portion of the dry matter in curd, although it also contains carbs, lipids, and minerals.

Dairy farming has evolved from a traditional family-run enterprise to a highly structured industry with technology specialities at every step of the process. Dairy farming machinery has advanced dramatically, allowing contemporary dairy farms to manage hundreds of dairy cows and buffaloes.

PROJECT COST ESTIMATE	
<b>Capacity:</b>	
<i>Moong Dal</i>	: 1 MT Per Day
<i>Masur Dal</i>	: 1 MT Per Day
<i>Toor Dal</i>	: 1.5 MT Per Day
<i>Chana Dal</i>	: 1 MT Per Day
<i>Kabuli Chana</i>	: 1 MT Per Day
<i>Desi Chana</i>	: 1.5 MT Per Day
<i>Katni Rice</i>	: 1.5 MT Per Day
<i>Bengal Joha Rice</i>	: 1 MT Per Day
<i>Assam Joha Rice</i>	: 1.5 MT Per Day
<i>Sonam Rice</i>	: 1.5 MT Per Day
<i>Groundnut</i>	: 2 MT Per Day
<b>Plant &amp; Machinery</b>	: ₹ 63 Lakhs
<b>Cost of Project</b>	: ₹ 1.65 Cr
<b>Rate of Return</b>	: 31%
<b>Break Even Point</b>	: 58%

## Business Industry of Grain Processing (Grading, Cleaning & Packaging of Rice & Pulses)

Grain processing, as exemplified by four milling, is essentially a physical process whereby the kernel is cleaned, adjusted to an appropriate moisture content and then mechanically reduced to the desired particle size to produce a flour. Where appropriate, four production also involves fractionation not only to separate bran, germ and endosperm from each other but also assure the correct particle size of the milled endosperm. The process involves neither chemical nor thermal treatments and thus does not bring about decontamination of the grain itself. The milling process can bring about changes in the distribution of contaminants when comparing amounts within the grain and the resultant mill fractions.

Major food grains basically used:

- Directly as food.
- For the production of starch, and starch to glucose.
- For the production of vegetable oil.
- For the production of protein rich food.
- For the production of cattle feed.
- In directly produced corn

steep liquor which is used in the fermentation method as vitamin source or mineral source.

Cereals and grains processing market is expected to grow at a rate of 10.40% in the period 2020 to 2027. The rising consumption of food products is the major factor driving the growth of cereals and grains processing market in the period of 2020- 2027. Agriculture is the primary source of livelihood for about 58% of India's population. Gross Value Added by agriculture, forestry, and fishing was estimated at Rs. 19.48 lakh crore (US\$ 276.37 billion) in FY20. Share of agriculture and allied sectors in gross value added (GVA) of India at current prices stood at 17.8 % in FY20. Consumer spending in India will return to growth in 2021 post the pandemic-led contraction, expanding by as much as 6.6%.

### PROJECT COST ESTIMATE

<b>Capacity:</b>	
<i>A2 Milk</i>	: 3,650 Kgs Per Day
<i>A2 Butter</i>	: 57 Kgs Per Day
<i>A2 Ghee</i>	: 50 Kgs Per Day
<i>A2 Paneer</i>	: 178.50 Kgs Per Day
<i>A2 Curd</i>	: 1,244 Kgs Per Day
<i>Manure</i>	: 7,000 Kgs Per Day
<b>Plant &amp; Machinery</b>	: ₹ 337 Lakhs
<b>Cost of Project</b>	: ₹ 1965 Lakhs
<b>Rate of Return</b>	: 26%
<b>Break Even Point</b>	: 42%

# Profitable Business Industry of Electric Motors

An electric motor is an electrical machine that converts electrical energy into mechanical energy. Some motor manufacturers, particularly those that produce sizes of 5 hp and up, finish-machine the bearing journals and rotor diameter as a rotor assembly. This operation produces the best possible concentricity between the bearing journals and rotor diameter. Most electric motors operate through the interaction between the motor's magnetic field and electric current in a wire winding to generate force in the form of torque applied on the motor's shaft. The applications of electrical motor include the following.

•The applications of electrical motor mainly include blowers, fans, machine tools, pumps, turbines, power tools, alternators, compressors,

## PROJECT COST ESTIMATE

<b>Capacity:</b>	
5 KW Three Phase Induction Motors	: 120 Nos. Per Day
10 KW Three Phase Induction Motors	: 120 Nos. Per Day
10 KW Brushed DC Motors	: 120 Nos. Per Day
Automated Water Pump	: 120 Nos. Per Day
5 KW Three Phase Induction Motors	
Plant & Machinery	: ₹ 467 Lakhs
Cost of Project	: ₹ 3949 Lakhs
Rate of Return	: 26%
Break Even Point	: 41%

rolling mills, ships, movers, paper mills.

•The electric motor is an essential device in different applications like HVAC- heating ventilating & cooling equipment, home appliances, and motor vehicles.

The Indian market for electric motors is highly fragmented owing to the presence of a large number of players including major companies and medium-sized enterprises. India Electric Motors Market is projected to grow at a CAGR of 5.9% during 2020-2026. The growing acceptance of electric vehicles is catalyzing the growth of the electric motors market size globally and in India as well. An upsurge in demand for automotive electric motors is expected over the coming years owing to rising fuel prices and stringent regulations towards reducing the air pollution level across the nation. Additionally, FAME II for 100% vehicle electrification, Make in India program and other initiatives to achieve India's target of becoming a global manufacturing hub would continue to boost the demand for electric motors in the country.

## Production Business of Sodium Bicarbonate and Acetic Acid

Sodium bicarbonate is a chemical compound with the formula NaHCO<sub>3</sub>. It is a salt composed of sodium ions and bicarbonate ions. Sodium bicarbonate is a white solid that is crystalline but often appears as a fine powder. It has a slightly salty, alkaline taste resembling that of washing soda (sodium carbonate). It has long been known and is widely used as baking soda, bread soda, cooking soda and bicarbonate of soda.

Acetic acid, systematically named ethanoic acid, is an acidic, colourless liquid and organic compound with the chemical formula CH<sub>3</sub>COOH (also written as CH<sub>3</sub>CO<sub>2</sub>H, C<sub>2</sub>H<sub>4</sub>O<sub>2</sub>, or HC<sub>2</sub>H<sub>3</sub>O<sub>2</sub>). Vinegar is no less than 4% acetic acid by volume, making acetic acid the main component of vinegar apart from water. Acetic acid is the second simplest carboxylic acid (after formic acid). It is an important chemical reagent and industrial chemical, used primarily in the production of cellulose acetate for photographic film, polyvinyl acetate for wood glue, and synthetic fibres and fabrics.

The sodium bicarbonate market is projected to grow at a CAGR of 4.95% to reach US\$2.053 billion in 2026 from US\$1.464 billion in

## PROJECT COST ESTIMATE

<b>Capacity:</b>	
Sodium Bicarbonate	: 100.0 MT Per Day
Acetic Acid	: 150.0 MT Per Day
Plant & Machinery	: ₹ 7051 Lakhs
Cost of Project	: ₹ 10501 Lakhs
Rate of Return	: 24%
Break Even Point	: 69%

2019. Sodium bicarbonate is widely known as baking soda or sodium hydrogen carbonate. It is available in white crystalline powder or granules and is odorless and has a cooling and slightly salty taste. It is moderately soluble in the water. It is one of the key ingredients in bakery products and is widely used in many detergents and cleaning products.

The global acetic acid market size was valued at USD 8.92 billion in 2019 and is expected to grow at a compound annual growth rate (CAGR) of 5.2% from 2020 to 2027. Rising demand for the product from Vinyl Acetate Monomer (VAM) producers worldwide is projected to remain a key driving factor for the market growth. VAM consumes a majority of the acetic acid produced worldwide. VAM is traditionally produced by reacting acetic acid with ethylene and oxygen along with a palladium catalyst which is typically conducted in the gas phase.

## Investment Opportunities in Carbonated Health Drinks

Carbonated drinks or fizzy drinks are beverages that contain dissolved carbon dioxide. The dissolution of CO<sub>2</sub> in a liquid, gives rise to fizz or effervescence. The process usually involves carbon dioxide under high pressure. When the pressure is removed, the carbon dioxide is released from the solution as small bubbles, which causes the solution to become effervescent, or fizzy. A common example is the dissolving of carbon dioxide in water, resulting in carbonated water. The Food and Drug Administration (FDA) ensures that carbonated soft drinks are safe, sanitary, and honestly labeled. In fact, FDA has established Current Good Manufacturing Practices (CGMPs) for carbonated soft drinks, which describe the basic steps manufacturers and distributors must follow to make sure carbonated soft drinks are safe.

Carbonated water is water that manufacturers infused with carbon dioxide gas. Drinking sparkling water provides the same sensation as drinking a soda without the

added calories and sugar. Most manufacturers flavor carbonated water using natural flavors. You may see carbonated water sold commonly under names such as: Sparkling Water, Soda Water, Club Soda, Fizzy Water, and Seltzer Water.

Energy drinks are widely consumed by adolescents as these claim to improve performance, endurance and alertness. Looking at the contents in the energy drinks and their benefits, the industry may like to relook at what the consumers really need.

Increased urbanization, rising disposable income and growing health consciousness among the Indian youth has increased the demand for non-carbonated drinks called energy drinks. At the same time long and erratic working hours and the increasing occurrence of social gatherings are driving Indian consumers towards consumption of energy drinks which are primarily classified as non-alcoholic, caffeinated beverages and sports drinks.

## PROJECT COST ESTIMATE

<b>Capacity:</b>	
Carbonated Health Drinks Size 250 ml	: 8,000 Packs Per Day
Carbonated Health Drinks Size 330 ml	: 4,000 Packs Per Day
Carbonated Health Drinks Size 500 ml	: 4,000 Packs Per Day
Plant & Machinery	: ₹ 49 Lakhs
Cost of Project	: ₹ 299 Lakhs
Rate of Return	: 31%
Break Even Point	: 59%

## NAME OF BOOKS

₹ / US\$

### CHEMICALS, FINE CHEMICALS, VITAMINS, AMINO ACIDS AND PROTEINS

- Handbook on Chemical Industries (Alcohol Based) ..... 750/- 100
- Industrial Chemicals Technology Handbook ..... 1100/- 125
- The Complete Technology Book on Chemical Industries..... 975/- 100
- Handbook on Manufacture of Acetophenone, Alcohols, Allethrin, Anthracene, Barium Potassium Chromate Pigment, Calcium Cyanamide, Carboxymethylcellulose, Carotene, Chlorophyll, Chemicals from Acetaldehyde, Fats, Milk, Oranges, Wood, Manufacture of Dye Intermediates and Dyes, Fine Chemicals, Formaldehyde, Granulated Fertilizers, Granulated Triple Superphosphate and Hydroquinone ..... 1100/- 125
- Handbook on Fine Chemicals, Vitamins, Amino Acids And Proteins ..... 1450/- 150
- Detailed Project Profiles on 9 Selected Chemical Industries (2nd Revised Edition) # ..... 1995/- 150
- Detailed Project Profiles On Chemical Industries (Vol II) (2nd Revised Edition) # ..... 1695/- 150
- The Complete Book on Non Ferrous and Precious Metals with Electroplating Chemicals..... 1975/- 200
- Modern Technology of Industrial Chemicals ..... 1100/- 125
- The Complete Technology Book on Fine Chemicals ..... 1100/- 125

### PHARMACEUTICAL, DRUGS

- Drugs & Pharmaceutical Technology Handbook ..... 1075/- 125
- Investment Opportunity in Drugs & Pharmaceutical Projects (2nd Edn.) # ..... 1895/- 150

### PESTICIDES, INSECTICIDES

- The Complete Technology Book on Pesticides, Insecticides, Fungicides and Herbicides (Agrochemicals) with Formulae, Manufacturing Process, Machinery & Equipment Details (2nd Rev. Edn.) ..... 1875/- 150
- Biopesticides Handbook ..... 1575/- 150

### STARCH & ITS DERIVATIVES

- The Complete Technology Book on Starch & Its Derivatives.. 1100/- 125

### WAX & POLISHES

- The Complete Technology Book on Wax and Polishes ..... 1895/- 200
- Wax Polishes Manufacturing Handbook with Process and Formulae (Automobile, Industrial, Leather, Furniture, Floor, Marine, Metal and Shoe Polish)..... 1675/- 150

### JUTE & COIR PRODUCTS

- The Complete Book on Jute & Coir Products (With Cultivation & Processing) 2nd Rev. Edn. .... 1095/- 100
- Handbook on 100% Export Oriented Jute & Jute Products (Eco Friendly Projects) # ..... 695/- 100

### BIO-TECHNOLOGY, NANOTECHNOLOGY, ENZYMES, FOOD BIO-TECHNOLOGY, VERMICULTURE, VERMICOMPOST, BIO-FERTILIZER, ORGANIC FARMING, BIOGAS, MUSHROOM

- Bio -Technology Handbook ..... 1100/- 125
- Plant Biotechnology Handbook ..... 1100/- 125
- Hand Book on Projects in Export Thrust Area with International Market Survey (Bio-Tech & Pharmaceutical Technology) # .... 1095/- 100
- Biotech & Pharmaceutical Handbook # ..... 1895/- 200
- Enzymes Bio -Technology Handbook..... 1100/- 125
- The Complete Book on Biotechnology Based Bulk Drugs ..... 1050/- 125
- Handbook on Food Bio-Technology (Extraction, Processing of Fruits, Vegetables and Food Products) 2nd Revised Edition... 1495/- 150
- Handbook on Plants and Cell Tissue Culture ..... 1275/- 125
- The Complete Technology Book on Vermiculture and Vermicompost (Earthworm) with Manufacturing Process, Machinery Equipment Details & Plant Layout (2nd Edn.) ..... 1275/- 125
- The Complete Technology Book on Bio-Fertilizer and Organic Farming (2nd Rev. Edn.) ..... 1400/- 150
- Handbook on Biogas and It's Applications (from Waste & Renewable Resources with Engineering & Design Concepts) 2nd Revised Edition ..... 1175/- 125
- Handbook on Mushroom Cultivation and Processing (With Dehydration, Preservation and Canning) ..... 1275/- 125
- The Complete Book on Organic Farming and Production of Organic Compost (2nd. Rev. Edn.) ..... 1575/- 150
- Nanotechnology Handbook ..... 1675/- 150
- Nanoscience and Nanotechnology Handbook ..... 1675/- 150
- Manufacture of Biofertilizer and Organic Farming..... 975/- 100
- Integrated Organic Farming Handbook ..... 1275/- 125
- Handbook on Organic Farming and Processing ..... 1275/- 125
- Handbook on Small & Medium Scale Industries (Biotechnology Products) ..... 1695/- 150

## NAME OF BOOKS

₹ / US\$

- Bioplastics & Biodegradable Products Manufacturing Handbook (Bioplastic Carry Bags, Bio-PET, Bioplastic Drinking Straws, Corn and Rice Starch-Based Bioplastics, Food Packaging Applications, Cassava Bags, Biodegradable Tableware, Biodegradable Plates, Biodegradable Toilet Paper, Starch Based Biodegradable Plastics, Polylactic Acid (PLA))..... 1575/- 150
- Handbook on Biofuel, Ethanol and Bioenergy Based Products (Ethanol as Biofuel, Methane Gas, Biodiesel, Biogas, Biomass Gasification, Bio-Chemical, Renewable Energy, Clean-Energy, Activated Carbon, Agricultural Residues, Forestry Residues, Animal Waste, Wood Wastes, Industrial Wastes, Municipal Solid Wastes and Sewage with Machinery, Manufacturing Process, Equipment Details and Plant Layout) ..... 1875/- 150

### PRINTING, PACKAGING, PRINTING INK

- Handbook on Modern Packaging Industries (2nd Rev. Edn.).. 1675/- 150
- Modern Technology of Printing & Writing Inks (2nd Rev. Edn.) .. 1475/- 150
- The Complete Technology Book on Printing Inks..... 1000/- 100
- Handbook on Printing Technology (Offset, Flexo, Gravure, Screen, Digital, 3D Printing with Book Binding and CTP) (4th Revised Edition) ..... 1675/- 150
- Screen Printing Technology Handbook..... 1000/- 100
- Modern Printing Technology..... 250/- 50
- The Complete Book on Printing Technology with Process Flow Diagrams, Plant Layouts and Machinery Details (Offset, Gravure, Flexographic, Security, Web Offset and Pad Printing) 2nd Rev. Edn. .... 1695/- 150

### PAPER, PULP & PAPER CONVERSION

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- The Complete Technology Book on Pulp & Paper Industries.. 1100/- 125
- Handbook on Pulp and Paper Processing ..... 1875/- 150

### CONFECTIONERY, VEGETABLES, SPICES, AGRO BASED, CEREAL FOOD, MILK, COCOA, CHOCOLATE, ICE CREAM, PLANTATION, FARMING, FOOD & BEVERAGES, FRUITS, DAIRY, OILS & FATS, BAKERY, SNACKS, FISHERIES, MEAT, COCONUTS, SUGARCANE, TEA CULTIVATION & PROCESSING

- Cultivation of Fruits, Vegetables and Floriculture..... 1100/- 125
- Cultivation of Tropical, Subtropical, Vegetables, Spices, Medicinal and Aromatic Plants ..... 1075/- 125
- Tropical, Subtropical Fruits and Flowers Cultivation..... 1075/- 125
- Food Packaging Technology Handbook (Biodegradable Films, Materials, Polymers, Aseptic Packaging, Labels and Labelling, Packaging of Cashew Nuts, Dairy Products, Milk, Fish, Meat, Shrimps, Canning of Vegetables, Fruits with details of Machinery and Equipments) 3rd. Rev.Edn..... 1895/- 200
- Modern Technology on Food Preservation (2nd Rev. Edn.).... 1275/- 125
- Modern Technology of Food Processing & Agro Based Industries (Confectionery, Bakery, Breakfast Cereal Food, Dairy Products, Sea Food, Fruits & Vegetable Processing) with Project Profiles (3rd Rev. Edn)..... 1775/- 150
- Modern Technology of Confectionery Industries with Formulae & Processes (2nd Rev.Ed.) ..... 600/- 100
- Modern Technology of Agro Processing & Agricultural Waste Products ..... 975/- 100
- Handbook on Agro Based Industries (2nd Rev. Edn.) # ..... 1595/- 150
- Handbook on Spices ..... 975/- 100
- Modern Technology of Oils, Fats & Its Derivatives (2nd Rev. Edn.) ..... 1875/- 150
- Manufacture of Food & Beverages (2nd Rev. Edn.) # ..... 1895/- 150
- Detailed Project Profiles on Dairy & Dairy Products (Dairy Industry, Dairy Packaging, Dairy Farming & Dairy Products, Chocolate Confectionery Plant, Cheese Analogue, Milk Processing, Skimmed Milk Powder & UHT Milk Plant) 3rd Revised Edition # ..... 2595/- 225
- Profitable Agro Based Projects with Project Profiles (Cereal Food Technology) (2nd Revised Edition) # ..... 1895/- 150
- Modern Technology of Milk Processing & Dairy Products (4th Rev. Edn.) ..... 1475/- 150
- The Complete Technology Book on Dairy & Poultry Industries with Farming & Processing (2nd Rev. Edn.) ..... 1275/- 125
- The Complete Technology Book of Cocoa, Chocolate, Ice Cream and Other Milk Products ..... 1275/- 125
- The Complete Technology Book on Flavoured Ice Cream (Manufacturing Process, Flavours, Formulations with Machinery Details) 2nd Revised Edition ..... 1475/- 150
- Handbook on Drying, Milling and Production of Cereal Foods (Wheat, Rice, Corn, Oat, Barley and Sorghum Processing Technology) (2nd. Revised Edition)..... 1295/- 125

## NAME OF BOOKS

₹ / US\$

- The Complete Book on Spices & Condiments (With Cultivation, Processing & Uses) (2nd Rev. Edn.) ..... 2275/- 200
- The Complete Book on Coconut & Coconut Products (Cultivation and Processing) ..... 1100/- 125
- Profitable Farming & Allied Projects (2nd Rev. Edn.) # ..... 1495/- 150
- Rabbit, Goat, Sheep, Poultry, Fish and Pig Farming with Feed Technology ..... 1100/- 125
- The Complete Technology Book on Bakery Products (Baking Science with Formulation & Production (4th Rev. Edition) .... 1995/- 200
- The Complete Technology Book on Snack Foods (2nd Rev. Edn.) ..... 1475/- 150
- The Complete Technology Book on Processing, Dehydration, Canning, Preservation of Fruits & Vegetables (Processed Food Industries) (4th Rev. Edn.) ..... 1995/- 200
- Handbook on Fruits, Vegetable & Food Processing with Canning & Preservation (3rd Rev. Edn.) ..... 1475/- 150
- Detailed Project Profiles on Plantation (Agro Based Projects) # ..... 1095/- 100
- Handbook on Fisheries and Aquaculture Technology ..... 1100/- 125
- The Complete Book on Meat Processing and Preservation with Packaging Technology ..... 1275/- 125
- Preservation of Meat and Poultry Products ..... 1100/- 125
- Potato and Potato Products Cultivation, Seed Production, Manuring, Harvesting, Organic Farming, Storage and Processing ..... 1275/- 125
- Handbook on Rice Cultivation and Processing ..... 1075/- 125
- The Complete Book on Beekeeping and Honey Processing (2nd Revised Edition) ..... 1475/- 150
- The Complete Technology Book on Alcoholic and Non-Alcoholic Beverages (Fruit Juices, Sugarcane Juice, Whisky, Beer, Microbrewery, Rum and Wine) ..... 2275/- 200
- Handbook on Citrus Fruits Cultivation and Oil Extraction ..... 1575/- 150
- Fruits, Vegetables, Corn and Oilseeds Processing Handbook ..... 1675/- 150
- Handbook on Spices and Condiments (Cultivation, Processing and Extraction) ..... 1575/- 150
- Handbook on Fermented Foods and Chemicals ..... 1875/- 150
- Industrial Alcohol Technology Handbook ..... 1675/- 150
- The Complete Book on Wine Production ..... 2275/- 200
- Handbook on Milk and Milk Proteins ..... 1275/- 125
- The Complete Book on Cultivation and Manufacture of Tea (2nd Revised Edition) ..... 1625/- 150
- The Complete Book on Sugarcane Processing and By-Products of Molasses (with Analysis of Sugar, Syrup and Molasses) .... 1675/- 150
- Confectionery Products Handbook (Chocolate, Toffees, Chewing Gum & Sugar Free Confectionery) ..... 1975/- 200
- The Complete Book on Fruits, Vegetables and Food Processing ..... 1675/- 150
- The Complete Book on Cashew (Cultivation, Processing & By-Products) ..... 1775/- 150
- The Complete Book on Tomato & Tomato Products Manufacturing (Cultivation & Processing) 2nd. Rev. Edn. .... 1400/-150
- The Complete Book on Onion & Garlic Cultivation with Processing (Production of Onion Paste, Flakes, Powder & Garlic Paste, Powder, Flakes, Oil) 2nd Revised Edition ..... 1575/-150
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# SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

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## SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

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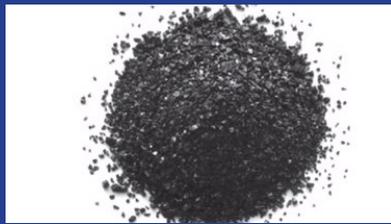
- » Flavoured Drinking Water
- » Flavoured Drinking Water (Still)
- » Mineral Water
- » Packaged Drinking Water
- » Packaged Drinking Water with PET Bottles



- » Packaged Drinking Water with PET Bottles (1 Ltr) (Automatic Plant)
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- » Activated Carbon from Coconut Shell, Rice Husk & Saw Dust



- » Activated Carbon from Wood
- » Activated Carbon Powder from Jute Sticks
- » Carbon Composite Fiber
- » Charcoal from Coconut Shell
- » Fullers Earth
- » Furfural from Corncobs, Rice Husk & Sugarcane Bagasse



## Alcohol



- » Absolute Alcohol (Ethanol)
- » Absolute Alcohol from Molasses
- » Alcohol Based Fuel Gel
- » Alcohol from Grains
- » Alcohol from Potato
- » Alcohol from Tapioca Starch
- » Beer Industry
- » Beer Plant
- » Beer, Whisky & Rum
- » Beer, Wine & Whiskey (from Pineapple)
- » Benzyl Alcohol
- » Country Liquor from Molasses
- » Craft Beer (Microbrewery or Craft Brewery)
- » Denatured Ethanol
- » Ethanol (Ethyl Alcohol) from Broken Rice, Maize & Wheat



- » Ethanol from Broken Rice, Maize & Wheat
- » Ethanol from Molasses
- » Ethanol from Rice Straw And Rice Husk
- » Ethanol from Rice, Rice Straw, Rice Husk, Rice Bran
- » Ethanol
- » Fatty Alcohol
- » Fruit Wine (Alcoholic Beverage)
- » Furfural Alcohol from Furfural (Hydrogenation)
- » Geraniol Derivative and Alcohol Extract of A Pinene
- » Good Prospects for Grain Based Alcohol (Distillery)
- » Grain Alcohol Distillery
- » Grain and Molasses-Based Ethanol Distillery
- » Grape Wine
- » Herbal Wine
- » IMFL Bottling Plant
- » IMFL, Indian Made Foreign Liquor (Whiskey, Rum,

- » Gin, Vodka and Brandy)
- » Integrated Sugar Plant (Cultivation of Sugarcane, Co-Generation & Distillery)
- » Liquor from Mahua (Wine and Hard Liquor)
- » Mahua Alcoholic Beverage
- » Medical Alcohol from Date Juice Concentrate
- » Methylated Spirit from Sugarcane Molasses
- » Polyvinyl Alcohol
- » Rectified Spirit
- » Rectified Spirit & Extra Neutral Alcohol (ENA)
- » Single Super Phosphate
- » Sugar Mill, Distillery and Power Plant
- » Surgical Methylated Spirit (Denatured Alcohol Surgical Spirit)
- » Wine from Kinnow Fruits
- » Wine Industry



### Adhesives and Sealants, Industrial Adhesives, Glues, Gums & Binders, Synthetic Resin, Resins (Guar Gum, Adhesive [Fevicol Type], Sodium Silicate Adhesive, Hot Melt Adhesives, Rubber Based Adhesive, Acrylic Adhesives, Guar Gum Powder, Gum Arabic)

- » ABS Resin
- » Acetates Production
- » Acrylic Adhesives
- » Acrylic Resin (Emulsion Type)
- » Adhesive (Fevicol Type)
- » Adhesive (Fevicol Type) Water Proofing Grade
- » Adhesive Based on Epoxy Resin (2 Pack)
- » Adhesive Based on Tapioca Starch in Powder Form (for Corrugated Board & Boxes)



- » Adhesive for Stickers
- » Adhesive from Maize Starch
- » Adhesives
- » Adhesives Based on Polyurethane
- » Adhesives Neoprene Based Rubber Adhesive for Footwear, Polyurethane based Adhesive for Footwear Epoxy Two Part (Resin & Hardener)
- » Alkyd Resin
- » Alkyl Resin from Cotton Seed Oil



- » Arabic Gum
- » BOPP Adhesive Tapes
- » Bopp Pressure Sensitive Adhesive Tape Boxes
- » CNSL Based Resin in Powder & Liquid Form
- » Cold Water Soluble Starch
- » Contact Adhesive
- » Corrugated Carton Boxes Gum Powder (Tamarind Kernel Powder Base)



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

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## SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

- » Corrugation & Pasting Adhesive (Dry Powder/Liquid)
- » Corrugation Gum Powder (Adhesive- Dry Powder)
- » Elastic and Rigid Tape
- » Electrical Insulating Tape Using BOPP Film
- » Epoxy Resin
- » Epoxy Resin Based Primer (Putty)
- » Extraction of Gelatin Glue from Leather Waste
- » Floral Foam
- » Floral Foam (Phenolic Foam) eith Resin
- » Footwear Epoxy Two Part (Resin & Hardener)
- » Glue from Leather Waste
- » Glycol Modified Poly Ethylene Terephthalate (PETG) Resin
- » Guar Gum
- » Guar Gum Powder
- » Guar Gum Powder Using Splits



- » Gum Arabic (Spray Drying Process)
- » Gum Karaya
- » Hexamethoxymethyl Melamine (Hmmm)
- » Hot Melt Adhesives
- » Hot Melt Adhesives for Corrugation Board
- » Hot Melt Adhesives Production (for Book Binding, Packaging and Courier Bag)
- » Instrument Cable
- » Lamination cum Bottle Labeling Adhesives & Wood Adhesive Starch Based (Tapioca or Maize)
- » Latex Based Adhesive
- » Leather Binder (Resin Based)
- » Menthol Crystals-Bold (EOU)
- » PE Wax Emulsion
- » Pigment Binders for Textile Printing
- » Polymer Modified Cementitious Tile Adhesives
- » Pressure Sensitive Adhesive for Bopp Tapes (Acrylic Based)



- » PVA Adhesive (Fevicol Type)
- » PVC Compounds from PVC Resins
- » PVC Solvent Cement
- » Resin Epoxy Adhesive and Hardener
- » Resin for Nail Polish (Polycondensation Resin (Polyester, Alkyds), Epoxy Tosylamide Resin, Solvent Based Acrylic Resin)
- » Rubber Based Adhesive
- » Silicone Sealant
- » Sodium Silicate Adhesive
- » Unsaturated Polyester Resin
- » Urea Formaldehyde Resin (Powder)
- » Wall Paper Starch
- » Water Based Acrylic Adhesive for Bopp Self Adhesive Tape
- » Xanthan Gum
- » Yellow Dextrin



## Alcoholic and Non-Alcoholic Beverages, Drinks, Hard and Soft Drinks, Fruit and Vegetable Juice, Agro Food Sector, Distilled Beverage, Carbonated and Non-Carbonated Drinks, Beer and Breweries, Caffeinated Beverages, Energy Drinks Projects



- » Absolute Alcohol (Ethanol)
- » Alcohol from Grains
- » Alcohol from Tapioca Starch
- » Automatic Plant- Pulp Based Fruit Drink
- » Beer & Whisky
- » Beer & Wine
- » Beer Industry (Export Unit)
- » Beer Plant
- » Beer Production from Rice with Packaging in Can & Bottles
- » Beer, Whisky & Rum
- » Beer, Wine & Whiskey (from Pineapple)
- » Bottling of Country Liquor
- » Bottling of Country Liquor (Automatic Plant)
- » Canned Carrot Juice & Bottle Gourd Long Melon (Lauki Ka Juice) in Aseptic Packaging
- » Carbonated and Non-Carbonated Drinks (Non-Alcoholic)
- » Cashew Fruit Juice from Cashew Apple
- » Chocolate Drink (Liquid Form)
- » Coconut and Cashew Feni
- » Coconut Water
- » Country Liquor
- » Country Liquor from Molasses
- » Craft Beer
- » Craft Beer (Microbrewery or Craft Brewery)
- » Craft Brewery or Distillery
- » Denatured Ethanol
- » Dried Malted Beverage Food (Health Drink, Cocoa Beverages in Granules Form) Malted Health Drinks
- » Ethanol from Broken Rice, Maize & Wheat
- » Ethanol from Rice Straw and Rice Bran



- » Ethyl Alcohol from Molasses
- » Extra Neutral Alcohol (ENA)
- » Flavoured Drinking Water
- » Fruit Beverage
- » Fruit Juice (Mango, Orange & Litchi) & Sugarcane Juice in Aseptic Packaging & PET Bottles
- » Fruit Juice Factory
- » Fruit Juice in Aseptic Packaging
- » Fruit Juices (Pineapple, Banana, Orange & Guava)
- » Fruit Wine (Alcoholic Beverage)
- » Glass Bottles for Beer
- » Grain & Potato Based Vodka Distillery
- » Grain and Molasses-Based Ethanol Distillery
- » Grain Based Alcohol Distillery
- » Grape Wine
- » Herbal Health Drink
- » Herbal Wine
- » IMFL Bottling Plant
- » IMFL, Indian Made Foreign Liquor (Whiskey, Rum, Gin, Vodka and Brandy)
- » Indian Made Foreign Liquor
- » Indian Made Foreign Liquor (Extra Neutral Alcohol)
- » Instant Ginger Powder Drink
- » Instant Tea
- » Lemon-Lime Flavoured Soft Drink (Nimbu Pani)
- » Liquor from Mahua (Wine and Hard Liquor)
- » Liquor from Mahua Flower
- » Litchi Beverage Production
- » Lychee Juice
- » Mahua Alcoholic Beverage
- » Mahua Oil & Country Liquor
- » Mango & Pomegranate Juice



- » Mango Juice
- » Mango Processing (Pulp & Juices)
- » Medical Alcohol from Date Juice Concentrate
- » Microbrewery or Brewpub
- » Nano Brewery
- » Orange Juice
- » Orange Juice Plant with Cold Storage Facility and Captive Power Plant
- » Packaged Drinking Water
- » Packaged Drinking Water with PET Glasses (250 ML) (Automatic Plant)
- » Packaged Drinking Water, Soda Water and PET Bottles
- » Profitable Grape Wine
- » Pulpury Fruit Drinks
- » Rectified Spirit & Extra Neutral Alcohol (ENA)
- » Rice Beer
- » Soda Water in Plastic Pouches
- » Soft Drink (Aerated Water)
- » Soft Drinks (Cola, Orange, Lemon, Mango Pulp, Ginger, Clear Lemon 7up Type)
- » Soft Drinks in Poly Pouches
- » Sugar Mill, Distillery and Power Plant
- » Sugarcane Juice Extraction and Packaging in Aseptic Packaging
- » Sugarcane Juice in Aseptic Packaging
- » Sugarcane Juice Preservation
- » Sugarcane Juice Preservation and Bottling Plant
- » Vodka from Potato
- » Wine from Grapes
- » Wine from Kinnow Fruits
- » Wine Industry



## Aluminium and Aluminium Downstream Projects, Aluminum Extrusion Profiles & Sections, Metal, Aluminum Products, Cans, Sheet, Extruded Products, Profiles, Doors, Windows, Aluminium Alloys, Tubes and Bars, Round Bars, Channels, Angles, Coils, Bars, Extruded Rods, Sheets, Foil

- » Activated Alumina
- » Activated Alumina Balls
- » Aerosol Cans
- » Alumina from Bauxite
- » Alumina from Bauxite (By Calcination Process)



- » Alumina Refinery
- » Alumina to Aluminium and Manufacturing of Profiles
- » Aluminium Alloy from Scrap and Virgin Metal
- » Aluminium Alloy from Virgin Metal



- » Aluminium Angles, Channels, Doors & Windows
- » Aluminium Anodizing Plant
- » Aluminium Bare Conductors
- » Aluminium Beverage Cans
- » Aluminium Bottles (Cold Extrusion of Aluminium)



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## SELECTED BUSINESS IDEAS FOR RIGHT INVESTMENT

- » Aluminium Bottles Caps, Metal Caps for Food Grade
- » Aluminium Building Hardware
- » Aluminium Cables and Conductors from Molten Aluminium Metal
- » Aluminium Cans
- » Aluminium Cans for Beer and Beverages
- » Aluminium Cans for Brewery
- » Aluminium Circle
- » Aluminium Cladding (Construction)
- » Aluminium Collapsible Tubes
- » Aluminium Collapsible Tubes (Printed)
- » Aluminium Collapsible Tubes for Pharmaceutical
- » Aluminium Conductors
- » Aluminium Conductors (AAAC and ACSR)
- » Aluminium Containers
- » Aluminium Easy Open End (EOE)
- » Aluminium Electrolytic Capacitor
- » Aluminium Extruded Bar Manufacturing from Aluminium EN AW 6063
- » Aluminium Extruded Profiles
- » Aluminium Extrusion Plant
- » Aluminium Fluoride
- » Aluminium Foil



- » Aluminium Foil (Food Packaging and Pharmaceuticals Foils)
- » Aluminium Foil Containers
- » Aluminium Foil Rolling Mill
- » Aluminium Foil Rolling Mill with PP Caps
- » Aluminium Food Containers
- » Aluminium from Alumina
- » Aluminium from Bauxite of Gibbsite Variety
- » Aluminium Furniture
- » Aluminium House Hold Utensils
- » Aluminium Ingot from Aluminium Scrap
- » Aluminium Ingots (Aluminium Alloy Ingots) from Aluminium Scrap
- » Aluminium Ingots from Aluminium Scrap
- » Aluminium Ingots from Used Beverage Cans
- » Aluminium Paint
- » Aluminium Pilfer Proof Caps
- » Aluminium Powder
- » Aluminium Pressure and Gravity Die-Casting
- » Aluminium Recycling Plant
- » Aluminium Rolling Mill
- » Aluminium Secondary Billet Casting Plant
- » Aluminium Wire & Cables
- » Aluminium Wire Drawing Wire Mesh Plant
- » Aluminium Cans Production



- » Aluminum Foil Containers Production
- » Aluminum Gravity Casting
- » Aluminum Ingots Manufacturing from Aluminum Scrap with Dross Processing
- » Aluminum Scrap Recycling-Aluminum Ingots Manufacturing from Aluminum Scrap with Dross Processing
- » Anodic Aluminium Labels
- » Automized Aluminium Powder
- » Calcined Alumina Powder
- » Cast Aluminium Strips and Ingots
- » Flexible Cartons, Stickers, Labels Manufacturing & Printing with Aluminium Foil
- » Food Packaging Foil
- » Poly Aluminium Chloride
- » Presensitized (PS) Plates of Aluminium
- » Pressure Cooker
- » Pressure Die Casting
- » Printed Tin Containers (Tin Cans)
- » Selenium Coated Aluminium Drum used in Plain Paper Copier
- » Sheet Metal Components for Automobile
- » Truck Body Building
- » Water Proofing Compound (Liquid and Powder)



## Lucrative Business Ideas for Startup

### Production Business of Sterile Water for Injection

**S**terile Water for Injection, USP (SWFI) contains water that has been purified by reverse osmosis and deionized by the use of advanced technologies so that it meets or exceeds the United States Pharmacopeia (USP) standards for sterility, physical qualities, and purity. SWFI has an ionic content of < 10 mg/L (TDS). It is commonly used in clinical applications where water is used as a vehicle or diluent for other medications. Sterile products are most frequently solution or suspensions, but may even be solid pellets for tissue implementation. The manufacturing of parenterals has become a highly specialized area in pharmaceutical processing. India's biotechnology industry comprising biopharmaceuticals, bio-services, bio-agriculture, bio-industry, and bioinformatics is expected to grow at an average growth rate of around 30 per cent a y-o-y to reach US\$ 100 billion by 2025. Indian pharmaceutical sector is expected to grow to US\$ 25 billion by 2025. Pharmaceuticals export from India stood at US\$ 20.70 billion in FY20. Pharmaceutical export include bulk drugs, intermediates, drug formulations, biologicals, Ayush and herbal products and surgical.

#### PROJECT COST ESTIMATE

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

### Profitable Production Business of Collagen Powder

**C**ollagen is the most abundant protein in our body, accounting for about one-third of its protein composition. It's one of the major building blocks of bones, skin, muscles, tendons, and ligaments. Collagen is also found in many other body parts, including blood vessels, corneas, and teeth. We can think of it as the "glue" that holds all these things together. In fact, the word comes from the Greek word "kolla," which means glue.

Collagen, which is high-value product from waste raw material such as unutilized skins of mammals, is a rigid, inextensible, fibrous protein that is the principal component of connective tissue in animals, including tendons, cartilage, bones, teeth, skin and blood vessels. As a structural protein it is mainly used to give strength to structures in the body, however, it has different functions depending on the location of the body.

There are a variety of collagen supplements available in the market these days. They may be available in the form of pills or powder depending upon the preference of the consumer. There are many sources for making this collagen. It includes collagen made from animal sources (animal parts, fish scales, bones, skin, etc.) as well as vegetarian collagen that is made from genetically modified yeast and bacteria.

Collagen supplement are dietary supplements that are used to address the deficiency of collagen in the diet. They are

<b>PROJECT COST ESTIMATE</b>	
<b>Capacity:</b>	
Collagen Powder	: 500 Kg. Per Day
Plant & Machinery	: ₹ 1178 Lakhs
Cost of Project	: ₹ 1935 Lakhs
Rate of Return	: 28%
Break Even Point	: 53%

usually derived from bones and skin of animals and fish. They come in a variety of forms, including pills, gummies, powder, and drinks. Collagen supplements are available across the world and can be consumed without the prescription of a medical practitioner. Collagen supplements are very popular among bodybuilders and regular fitness enthusiasts as they help them maintain the health of their skin and bones.

The market is expected to reach USD 8.67 billion in 2021. The global collagen market is expected to grow at a compound annual growth rate of 9.0% from 2020 to 2028 to reach USD 16.7 billion by 2028. The growth of the collagen supplement market can be attributed to several health and beauty benefits associated with the ingestion of collagen supplement. For instance, the ingestion of collagen supplement enhances the health of skin by reducing dryness and wrinkles. It also increases muscle mass, improves bone health, and provides relief from joint pain.

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

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# Business Opportunities in Venturing into Silicon Metal

Silicon is the fourteenth element of the periodic table and is a Group IVA element, along with carbon, germanium, tin and lead. Pure silicon is a dark gray solid with the same crystalline structure as diamond. Its chemical and physical properties are similar to this material. Silicon has a melting point of 2570°F (1410°C), a boiling point of 4271°F (2355°C), and a density of 2.33 g/cm<sup>3</sup>.

Silicon is the second most common element in the Earth's crust, although it is hard to find it in nature as a pure element. China is by far the world's largest producer of silicon, including thereby silicon content for

ferrosilicon and silicon metal. Around 4.6 million metric tons of silicon was produced in China in 2016 which accounted for about two-thirds of global production that year, which reached about 7.2 million metric tons. Other major producers are Russia, the United States, and Brazil.

Silicon based polymers, known as silicones, provide an alternative to environmentally harmful hydrocarbon based products. We unknowingly use these polymers in everyday items from lubricants, greases and resins to skin and hair care products, antiperspirants, polishes, anti-foam agents and fabric softeners.

## PROJECT COST ESTIMATE

Capacity	: 167 MT Per Day
Plant & Machinery	: ₹ 2138 Lakhs
Cost of Project	: ₹ 6900 Lakhs
Rate of Return	: 28.47%
Break Even Point	: 60.26%

The silicon metal market was valued at over 2.9 million ton, and the market is projected to register a CAGR of 4% during the period of (2021-2026). Silicon metal is the base material for so many products; hence, it has an important role in industrial and consumer sectors.

Presently, the use of silicon metal for producing aluminum alloys holds the largest share in the total silicon metal production. Aluminum alloys are used in producing automotive components and aerospace products.

COVID-19 has affected both the demand and supply of silicon all around the world. Due to restrictions, there could not be a regular material supply, while most of the silicon metal plants stopped production temporarily. The price reversal due to COVID-19 and the recent commerce imposition of preliminary duties on all silicon metal imports may further affect the market negatively.

## Emerging Business of Ductile Iron Pipe Fittings

Pipe fittings basically include the range of components that are used to connect pipe ends for in-line, multi-port, offset and mounting configurations. Pipe fitting cross sections are mostly, but not always, circular in shape to match with the pipe section with which they are connected. Pipes can be metallic or plastic and pipe fittings vary depending on the type of pipe used.

The plastic pipes used are predominantly PVC pipes and recent increase in use of HDPE pipes in competition for PVC pipes. The other pipes include GRP, BWSCC pipes, Hume pipes, stoneware pipes, etc. GRP pipes, RCC pipes, and stoneware pipes are used predominantly in sewerage applications.

### PROJECT COST ESTIMATE

Capacity	: 12 MT Per Day
Plant & Machinery	: ₹ 311 Lakhs
Cost of Project	: ₹ 1135 Lakhs
Rate of Return	: 33.83%
Break Even Point	: 55.20%

The increasing share of DI pipes obviously indicates its rising acceptance by customers and its growing popularity. The increasing share of DI pipes indicates that DI pipes are gradually replacing all other pipes, especially steel pipes. The government bodies have virtually stopped purchase of CI pipes for potable water supply and the existing CI pipelines are increasingly being replaced by DI pipes. Plastic pipes and cement pipes (AC/RCC/PSC) are also being replaced in urban and semi-urban areas; however, in rural water supply schemes they still exist due to the low initial investment.

## Lucrative Business of Steel Containers (Cargo Containers)

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

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

### PROJECT COST ESTIMATE

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

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

## Start Manufacturing of Micronutrient Fortified Energy Dense Food

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

### PROJECT COST ESTIMATE

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

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

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

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