## **HI-TECH PROJECTS**

(An Industrial Monthly Magazine on New Project Opportunities and Industrial Technologies)

August 2015 Issue (E-copy)



## ENGINEERS INDIA RESEARCH INSTITUTE

Regd. Off: 4449, Nai Sarak, Main Road, Delhi - 110 006 (India)

\* Ph: +91 9811437895, 9811151047, 91-11-23918117, 23916431, 45120361, 23947058, 64727385

\* E-Mail : eiriprojects@gmail.com, eiritechnology@gmail.com

\* Website: www.eiriindia.org, www.industrialprojectreports.com

Deposit the amount in "EIRI "Account with HDFC BANK CA- 05532020001279 (RTGS/NEFT/IFSC CODE: HDFC0000553) OR ICICI BANK CA - 038705000994 (RTGS/NEFT/IFSC CODE: ICIC0000387) OR AXIS Bank Ltd. CA - 054010200006248 (RTGS/NEFT/IFSC CODE: UTIB0000054) OR UNION BAK OF INDIA CA-307201010015149 (RTGS/NEFT/IFSC CODE: UBIN0530727) OR STATE BANK OF INDIA CA-30408535340 (RTGS/NEFT/IFSC CODE: SBIN0001067) AND JUST SMS US ON PH. 09811437895

## JUST PREPARED NEW PROJECTS FOR YOU

## BOTTLING PLANT (IMFL & COUNTRY LIQUOR) [EIRI-1732]

An Overview of the Indian Liquor Industry, The alcohol industry is very important for the government. It generates an estimated Rs. 18,000 crore per annum in spite of the fact that the per capita consumption of liquor in India is the lowest in the world. The total liquor industry is worth Rs. 2,000 crore. IMFL accounts for only a third of the total liquor consumption in India. Most IMFLs are cheap and are priced below Rs. 300 per bottle. Alcohol sales proceeds account for 45% of the total revenue collection in the country. Whiskey accounts for 60% of the liquor sales while rum; brandy any vodka account for 17% 18% and 6% respectively.

### **Cost Estimation**

| Plant Capacity            | 800 Boxes/Day |
|---------------------------|---------------|
| Land & Building (3 Acres) | Rs. 4.40 Cr.  |
| Plant & Machinery         | Rs. 3.23 Cr   |
| W.C. for 1 Months         | Rs. 1.94 Cr   |
| Total Capital Investment  | Rs. 9.88 Cr   |
| Rate of Return            | 22%           |
| Break Even Point          | 61%           |

## PET VIRGIN GRANULE PROCESSING (PET GRANULES/DANA) [EIRI-1733]

Polyethylene Terephthalate (PET) is a thermoplastic polyester. It is used for the production of bottles, sheet, strapping and injection moulded products. PET bottles are used in a wide range of applications such as carbonated soft drink (CSD), water (still/carbonated), Liquor (IMFL/Country Liquor), Edible Oil, pharmaceutical, food and beverages, agro chemicals, toiletries, cosmetics and consumer goods. PET is also used for non-bottle applications such as thin/thick sheet, dual-ovenable Crystallised PET (CPET) containers, injection moulded components and strapping.

## **Cost Estimation**

| Plant Capacity                | 3.33 MT./Day   |
|-------------------------------|----------------|
| Land & Building (1000 Sq.mt.) | Rs.1.43 Cr.    |
| Plant & Machinery             | Rs. 51 Lacs    |
| W.C. for 1 Month              | Rs. 85.85 Lacs |
| Total Capital Investment      | Rs. 2.86 Cr.   |
| Rate of Return                | 32%            |
| Break Even Point              | 52%            |

## GYPSUM PLASTER BOARD, GYPSUM PLASTER AND PLASTER OF PARIS [EIRI-1734]

Gypsum Plaster Boards are contructional sheets composed of concined Gypsum with about 15% fibre. Its outstanding contributes are fire resistance, dimentional stability, easy workability and low cost fibres are added to provide crack resistance and for fire resistance water repellent chemicals may be added to the board core. The various sources of gypsum in India when developed will yield in addition to high grade gypsum. According to the present knowledge the latter has prospect of economic use as building materials, namely plaster, plaster boards and block. Gypsum plaster boards can be used as covering for walls

ceilings and partition in normally by environments and under controlled conditions of humidity and temperature in buildings.

### **Cost Estimation**

| Land & Building (15,000 Sq.mt.) | Rs. 15.20 Cr. |
|---------------------------------|---------------|
| Plant & Machinery               | Rs. 2.83 Cr.  |
| W.C. for 2 Months               | Rs.8.33 Cr.   |
| Total Capital Investment        | Rs. 26.90 Cr. |
| Rate of Return                  | 39%           |
| Break Even Point                | 39%           |
|                                 |               |

## DISTRIBUTION TRANSFORMER MANUFACTURING AND RECONDITIONING [EIRI-1735]

A transformer is a device that transfers electrical energy from one circuit to another through inductively coupled conductors the transformer's coils. A varying current in the first or primary winding creates a varying magnetic flux in the transformer's core and thus a varying magnetic field through the secondary winding. This varying magnetic field induces a varying electromotive force (EMF), or "voltage", in the secondary winding. This effect is called inductive. If a load is connected to the secondary, current will flow in the secondary winding and electrical energy will be transferred from the primary circuit through the transformer to the load. By appropriate selection of the ratio of turns, a transformer thus enables ar alternating current (AC) voltage to be "stepped up" by making Ns greater than Np, or "stepped down" by making Ns less than Np. The windings are coils wound around a ferromagnetic core, air-core transformers being a notable exception.

## Cost Estimation

| Plant Capacity                | 486 Nos/Year |
|-------------------------------|--------------|
| Land & Building (3000 Sq.mt.) | Rs. 3.04 Cr. |
| Plant & Machinery             | Rs. 62 Lacs  |
| W.C. for 2 Months             | Rs. 91 Lacs  |
| Total Capital Investment      | Rs. 4.79 Cr. |
| Rate of Return                | 28%          |
| Break Even Point              | 58%          |
|                               |              |

## COPPER OXYCHLORIDE (EIRI-1736)

Fungi are a large group of nongreen plants dependent upon the organic food made by photosynthesizing green plants. They represent a constant and ever present threat to many agricultural crops ranging from tropical and semi-tropical vegetation to temperate climate crops. Thus the control of phytopathogenic fungi is of great economic importance since fungal growth on plants or on parts of plants inhibits production of foliage, fruit or seed, and the overall quality of a cultivated crop. In addition, certain groups of fungi produce mycotoxins in infected crops, directly posing a health hazard to humans and animals.

## Cost Estimation

| Plant Capacity                | 9 MT/Day     |  |
|-------------------------------|--------------|--|
| Land & Building (1500 Sq.mt.) | Rs. 1.52 Cr. |  |
| Plant & Machinery             | Rs. 1.07 Cr. |  |
| W.C. for 2 Months             | Rs. 2.39 Cr. |  |
| Total Capital Investment      | Rs. 5.33 Cr. |  |
| Rate of Return                | 90%          |  |
| Break Even Point              | 25%          |  |
| ****************              |              |  |

## INTEGRATED UNIT OF LIME STONE TO LIME, SODIUM CARBONATE & BICARBONATE AND CAUSTIC SODA [EIRI-1737]

Alkali chemical constitutes the oldest segment of the chemical industry. These chemicals serve as key inputs for a number of industries such as aluminium, soap, detergent, glass, tyre rubber, pulp and paper, pharmaceutical, water treatment, textiles, leather, fiber etc. The key chemicals in the chlor-alkali industry are Caustic Soda, Chlorine (including liquid chlorine), Soda Ash. Caustic Soda (chemically known as Sodium Hydroxide) and Chlorine are produced together through the electrolysis of common salt solution (Sodium Chloride or Brine). Caustic Soda and Chlorine are generated in the ratio of 1:0.89. Demand for chlorine drives caustic soda production globally, but in India the industry has developed in line with the demand-supply balance of caustic soda.

## Cost Estimation (Rupees in Lacs)

| i ooot Eotimation (map     | ,co <b>_</b> acc, |
|----------------------------|-------------------|
| Plant Capacity             | 500 MT/Day        |
| Land & Building (40 Acres) | Rs. 6.775 Lac     |
| Plant & Machinery          | Rs. 9.586 Lac     |
| W.C. for 3 Months          | Rs.7.162 Lac      |
| Total Capital Investment   | Rs. 26.128 Lac    |
| Rate of Return             | 58%               |
| Break Even Point           | 34%               |

## SODIUM HYDRO SULFITE [EIRI-1738]

Sodium hydrosulfite is an important chemical used in the textile industry and sugar industry. It is also used in rubber industry as a oxyger remover. The another names of sodium hydrosulfite are sodium hydrosulfite and sodium dithionite and Sodium Sulfoxylate. It has the chemical formula.

## **Cost Estimation**

| Plant Capacity           | 20 Tons/Day   |
|--------------------------|---------------|
| Land & Building (1 Acre) | Rs. 2.53 Cr.  |
| Plant & Machinery        | Rs. 2.10 Cr.  |
| Total Capital Investment | Rs. 12.82 Cr. |
| Rate of Return           | 59%           |
| Break Even Point         | 31%           |
|                          |               |

## AYURVEDIC COLLEGE WITH HOSPITAL [EIRI-1739]

Ayurveda, the perfect science or knowledge of life is believed to be the oldest treatment method which evolved around 600 BC in India. The word Ayurveda originated from the two Sanskrit words, 'Ayur' meaning life and 'Veda' meaning knowledge. Ayurveda practiced by special physicians called 'Vaidyas' is known to promote positive health, natural beauty and long life. Life, according to Ayurveda, is a combination of senses, mind, body and soul.

| Land & Building (5 Acres) | Rs. 14.52 Cr. |
|---------------------------|---------------|
| Plant & Machinery         | Rs. 13 Cr.    |
| W.C. for 3 Months         | Rs.3.27 Cr.   |
| Total Capital Investment  | Rs. 32 Cr.    |
| Rate of Return            | 29%           |
| Break Even Point          | 57%           |

## MULTI CRORES PROFITABLE PROJECTS (From Rs. 2 Cr. to Rs. 2500 Cr. Projects)

## op Industries to Star

| $\vee$   | (65 Project Reports III CD) Rs.                         |                   |
|----------|---|-------------------|
|          | ROJECT NAME PROJECT                                     |                   |
| 1.       | ALUMINIUM EXTRUSION                                     | 17 Cr.            |
| 2.       | ALCOHOL FROM BROKEN RICE                                | 6 Cr.             |
| 3.       | AUTOMATICAL CONTROL FOLID                               | 4 Cr.             |
| 4.<br>5. | AUTOMATION CONTROL EQUIP.<br>BATTERY-OPERATED 3 WHEELER | 50 Cr.<br>6 Cr.   |
| 5.<br>6. | BEER INDUSTRY   | 41 Cr.            |
|          | BED SHEET, BED COVER, SOFA CLOTH                        |                   |
| 8.       | BIOFERTILIZER   | 2 Cr.             |
| 9.       | BUTYL RUBBER  | 7 Cr.             |
| 10.      | BOTTLING PLANT  | 41 Cr.            |
| 11.      | BIOCIDES FOR DISTILLER                                  | 20 Cr.            |
| 12.      | BENIFICATION PLANT-MANGANESE ORE                        | 18 Cr.            |
|          | CHICKEN FARMING (HATCHERY)                              | 22 Cr.            |
|          | CORRUGATED SHEET BOARD & BOXES                          | 5 Cr.             |
|          | COMPUTER SOFTWARE DEVELOPMENT                           |                   |
| 16.      | CONSTRUCTION CHEMICALS                                  | 5 Cr.             |
|          | CHICKEN PROCESSING CHROME BENEFICIATION PLANT           | 28 Cr.<br>114 Cr. |
|          | CASEIN FROM MILK  | 63 Cr.            |
|          | DEHYDRATION OF ONION & GARLIC                           | 6 Cr.             |
|          | DEHYDRATION OF FRUITS                                   | 0 01.             |
|          | & VEG. BY IQF TECHNOLOGY                                | 5 Cr.             |
| 22.      | DISPOSABLE PLASTIC SYRINGES                             | 14 Cr.            |
| 23.      | E.R.W. STEEL PIPES & TUBES                              | 27 Cr.            |
| 24.      | FERRIC ALUM   | 9 Cr.             |
|          | GUARGUM POWDER FROM GUAR SPLIT                          |                   |
| 26.      | HOSPITAL (100 BEDS)                                     | 68 Cr.            |
|          | IRON ORE MINING   | 302 Cr.           |
| 28.      | INTEGRATED UNIT OF DAIRY,                               | 0.0               |
| 20       | FARMING MILK COLLECTION ETC.                            | 9 Cr.<br>41 Cr.   |
|          | I M F L (WINE, BRANDY, WHISKY<br>KATHA & KUTCH          | 5 Cr.             |
|          | KRAFT PAPER   | 23 Cr.            |
|          | KRAFT PAPER FROM BAGASSE                                | 15 Cr.            |
|          | MULTIPRODUCTS   | 1795 Cr.          |
|          | MULTIPURPOSE COLD STORAGE ETC                           |                   |
|          | MEGA FOOD PARK  | 16 Cr.            |
| 36.      | M.S. PIPE (WELDED)                                      | 20 Cr.            |
|          | MEDICAL COLLEGE, HOSPITAL ETC.                          | 17 Cr.            |
| 38.      | MILD STEEL SECTION MILL (ANGLES,                        |                   |
| 00       | CHANNELS, ROUND, SQUARES, ETC.)                         | 17 Cr.            |
|          | MONOCHLORO ACETIC ACID MONOCHLORO ACETIC ACID           | 23 Cr.            |
| 40.      | FROM ETHANOL AND CHLORINE                               | 18 Cr.            |
| 41       | MINERAL WATER CUM                                       | 10 01.            |
| 41.      | PET BOTTLE MANUFACTURING UNIT                           | 10 Cr.            |
| 42.      | PORTLAND CEMENT PLANT                                   | 178 Cr.           |
|          | POWER PLANT FROM BIO GAS                                | 12 Cr.            |
| 44.      | PRODUCTION OF BIO-OIL                                   | 3 Cr.             |
|          | PVC PIPE AND FITTING                                    | 3 Cr.             |
|          | PAPER PLANT   | 140 Cr.           |
| 47.      | POWER PLANT (GAS BASED)                                 | 17Cr.             |
| 48.      | RESIDENTIAL COMPLEX (TOWNSHIP)                          | 520 Cr.           |
|          | ROLLING MILL BY TMT TECHNOLOGY                          | 16 Cr.            |
| 50.      | ROLLING MILL WITH INDUCTION FURNACE                     | 79 Cr.            |
| 51       | SUGAR PLANT   | 90 Cr.            |
|          | SPONGE IRON FROM IRON ORE                               | 148 Cr.           |
|          | SOLAR POWER (ENERGY) PLANT                              | 105 Cr.           |
|          | STEEL PLANT BASED ON INDUCTION                          |                   |
|          | FURNACE   | 39 Cr.            |
| 55.      | STEEL PLANT (BILLETS) BASED                             |                   |
|          | ON INDUCTION FURNACE                                    | 232 Cr.           |
| 56.      | STEEL TRANSMISSION LINE TOWER                           |                   |
|          | & HOT ROLLING MILL                                      | 60 Cr.            |
|          | SODIUM TRIPOLY PHOSPHATE                                | 71 Cr.            |
| 58.      | TYRES, TUBES & FLAP<br>TUBULAR STEEL SWEDGE TYPE POLE   | 94 Cr.<br>12 Cr.  |
|          | TMT STEEL BARS  | 4 Cr.             |
|          | UREA FERTILIZER PLANT                                   | 2505 Cr.          |
|          | VODKA FROM POTATOES                                     | 26 Cr.            |
| 63       |   | 24 Cr             |

Each Project Report covers in this CD contains Introduction, Uses, Market, Process with Production Formulae, Suppliers of Plant & Equipments and Ray Materials, Cost Economics with Profitability Analysis BEP, Resources of Finance etc

63. WOMEN POLYTECHNIC COLLEGE

Price of this CD containing all above 63 Project Reports is **Rs. 1,09,551/-**. Payable fully in advance through Bank Draft/M.O. in favour of **ENGINEERS** INDIA RESEARCH INSTITUTE, DELHI. Deliver (To Order please dial : 098114-37895)

## ZINC EDTA [EIRI-1740]

Zinc EDTA is a derivative of Ethylene diamine Tetra acetic Acid. Ethylene diamine Tetra acetic Acid is a Sequestering / Chelating Agent. EDTA is a synthetic amino acid. It is widely known as EDTÁ. It is a white powder. EDTA Acid is insoluble in water. It is also named as Ethylene diamine Tetra acetate. It is widely used to dissolve Metallic Impurities. There are various Salts/Derivatives of EDTA. EDTA is widely recognized as effective Sequestering Agent. EDTA grabs metallic cation such as Lead or Calcium from the process and forms a stable compound that is then excreted from the system. The stability of this bond is vital to get the success in removing the inorganic impurities out of the system. If the bond is weak. other chemicals can break this bond to form their own compounds.

### Cost Estimation

| Plant Capacity               | 1 MT./Day      |  |
|------------------------------|----------------|--|
| Land & Building (800 Sq.mt.) | Rs. 1.14 Cr.   |  |
| Plant & Machinery            | Rs. 42.25 Lacs |  |
| W.C. for 1 Month             | Rs. 47.42 Lacs |  |
| Total Capital Investment     | Rs.2.11 Cr.    |  |
| Rate of Return               | 29%            |  |
| Break Even Point             | 50%            |  |
|                              |                |  |

## **MASTER BATCHES** (COLOURED, PVC, LDPE, HDPE) [EIRI-1741]

As the name Suggests the predispersed colors or color concentrates contain a high ropertion (20-50% or even more) of pigment by weight uniformly dispersed in a suitable carrier resin The carrier resin may be a liquid or solid. In the former case the product is a liquid dispersion while in the latter case the product is known as solid predispered colour. Liquid dispersions may be available as low viscosity materials for plastisols, or high viscosity pastes for thermoplastics. Solid concentrates in the form of powders they are suitable for use in powder resins. These concentrates are usually marketed for specific or a group of related plastics. Some so called universal dispersions are also available in the market.

| Cost Estillation              |              |  |
|-------------------------------|--------------|--|
| lant Capacity                 | 4 Ton/Day    |  |
| Land & Building (1500 Sq.mt.) | Rs. 2.12 Cr. |  |
| Plant & Machinery             | Rs. 55 Lacs  |  |
| W.C. for 3 Months             | Rs. 2.76 Cr. |  |
| Total Capital Investment      | Rs. 5.53 Cr. |  |
| Rate of Return                | 38%          |  |
| Break Even Point              | 40%          |  |
|                               |              |  |

## MANUFACTURING DOUBLE GLAZED UPVC WINDOWS WITH ARGON FILL [EIRI-1742]

uPVC - Unplasticized polyvinyl chloride Chemical composition - PVC (resin) +CaCo3 (calcium carbonate) + Tio2 (titaniun-di-oxcide) uPVC also known as rigid PVC is extensively used in the building industry as a lowmaintenance material. Very strong plastic used for making window frames and other parts of buildings. Wide range of colors, wooden finishes

and other textures, uPvc have High impact resistance, Unaffected by temperature Corrosion resistant, Resistant to exhaust fumes and building industry chemicals, Aging resistant & etc. Windows and doors are the connection between rooms and the outside world. They allow light and air into the house and enable you to see the world outside while protecting rom wind, harmful rays of sun and rain. They keep us warm in the winter and cool in the

### Cost Estimation

|   | Plant Capacity                | 1000 sq.ft./Day |
|---|-------------------------------|-----------------|
| 1 | Land & Building (1500 Sq.mt.) | Rs. 75 Lacs     |
|   | Plant & Machinery             | Rs. 1.55 Cr.    |
|   | W.C. for 3 Months             | Rs. 2.76 Cr.    |
|   | Total Capital Investment      | Rs. 5.15 Cr.    |
|   | Rate of Return                | 25%             |
|   | Break Even Point              | 55%             |
|   | **********                    | ******          |

## MINI FLOUR MILL (ATTA, MAIDA, SUJI) [EIRI-1743]

The plant will have facility to produce, Maida Sooji, Atta and bran. These products will be sold as per the guidance issued for Food and Civil Supplies Department of the concerned state The same plant can be used to process other cereals such as rice gram, dal etc. However attempt is made have to examine feasibility and profitability of processing wheat to produce Maida, Sooji, Atta and bran. Flour mill serve the purpose of processing wheat to convert it into flour. Wheat grains are the seeds of the wheat plant which is able to grow is kinds of soil and under widely differing climatic conditions

## Cost Estimation

| Plant Capacity                | 20 MT./Day   |  |
|-------------------------------|--------------|--|
| Land & Building (1500 Sq.mt.) | Rs. 2.40 Cr. |  |
| Plant & Machinery             | Rs. 1.21 Cr. |  |
| W.C. for 1 Month              | Rs. 1.18 Cr. |  |
| Total Capital Investment      | Rs. 4.85 Cr. |  |
| Rate of Return                | 30%          |  |
| Break Even Point              | 51%          |  |
| ***************               |              |  |

## BANANA FIBRE EXTRACTION AND HAND MADE PAPER [EIRI-1744]

The use of "Banana" fiber for textile and other purpose as natural material is a new concept for India. However, considerable research work has been done by textile research organizations including BITRA, CITRA, KVIC (Khadi Village Industry Corporation) and NRCB (National Research Centre for Banana-Trichy) and it has been found that banana fiber can be a very promising source of natural fiber in the coming period. It may be noted that this fiber is already used successfully in Philippines since decades and hence it is also known popularly as "Manila Hemp".

| Plant & Machinery        | Rs. 1.37 Cr. |
|--------------------------|--------------|
| W.C. for 3 Months        | Rs. 1.90 Cr. |
| Total Capital Investment | Rs. 9.96 Cr. |
| Rate of Return           | 88%          |
| Break Even Point         | 22%          |
| ************             |              |

## **Start Your Own Industry**

## SUPERABSORBENT POLYMER (POLY ACRYLIC ACID BASED) [EIRI-1745]

Superabsorbent polymers are primarily used as an absorbent for water and aqueous solutions for diapers, adult incontinence products, feminine hygiene products, and similar applications. Undoubtedly, in these applications, superabsorbent materials will replace traditional absorbent materials such as cloth, cotton, paper wadding, and cellulose fiber. Commercial production of superabsorbent polymers began in Japan in 1978, for use in feminine napkins. This early superabsorbent was a crosslinked starch-g-polyacrylate. Polyacrylic acids eventually replaced earlier superabsorbents, and is the primary polymer employed for superabsorbent polymers to Day. 1 In 1980, European countries further developed the superabsorbent polymer for use in baby diapers. This first diapers employing this technology used only a small amount of polymer, approximately 1-2 g. In 1983, a thinner diaper using 4-5 grams of polymer and less fluff was marketed in Japan. The use of superabsorbent polymers revolutionized the diaper industry. Diaper manufacturers began to design diapers to take advantage of the amazing liquid retention ability of the polymer

### Cost Estimation

| Plant Capacity            | 320 MT./Day    |
|---------------------------|----------------|
| Land & Building (8 Acres) | Rs. 19.80 Cr.  |
| Plant & Machinery         | Rs. 16 Cr.     |
| W.C. for 3 Months         | Rs. 484.50 Cr. |
| Total Capital Investment  | Rs. 521.45 Cr. |
| Rate of Return            | 37%            |
| Break Even Point          | 28%            |
|                           |                |

## STAINLESS STEEL UTENSILS [EIRI-1746]

Stainless steel cookware and bake ware is exceptionally durable. Once stainless steel has been stamped, spun or formed into utensi shape, it takes an extremely hard blow to dent it. Its attractive finish won't corrode or tarnish permanently, and its hard, tough, nonporous surface is resistant to wear. Extremely smooth and scratch resistant, stainless steel utensils take an excellent polish. Top-of-the-range cookware, bakeware, pantryware, tools and other equipment are frequently produced in stainless steel, which eases the work of homemakers. Like other steels, stainless steel is an alloy a combination of iron and other metals. What makes it different from other steels, however, is that it contains at least 11 percent chromium. It is chromium that makes steel "stainless" all the way through. Stainless steel may also contain other elements, such as nickel, molybdenum, columbium or titanium

## **Cost Estimation**

| Plant Capacity                | 720 Kg./Day  |
|-------------------------------|--------------|
| Land & Building (2000 sq.mt.) | Rs. 1.31 Cr. |
| Plant & Machinery             | Rs. 19 Lacs  |
| W.C. for 2 Months             | Rs. 52 Lacs  |
| Total Capital Investment      | Rs. 2.11 Cr. |
| Rate of Return                | 20%          |
| Break Even Point              | 65%          |

## DOUGH MOULDING **COMPOUND (DMC) BULK** MOUDING COMPOUND (BMC) SHEET MOULDING COMPOUND (SMC) [EIRI-1747]

Bulk moulding compounds represent a family of chopped fibre thermoset or thermoplastic based composite materials. Fibre lengths are typically 1/2 inch, 1 inch or 2 inch (6 to 50 mm). Longer fibres provide higher tensile strengths while shorter fibres allow more complex shapes to be moulded. Standard modulus and intermediate modulus fibres are utilized as is S2 glass. Ten Cate offers a complete line of epoxy based thermosets and also offers a line of thermoplastic resins such as PEEK, PEKK, PPS and PEI. Thermoplastic based resins offer low moisture uptake, good impact resistance and low flame, smoke and toxicity. Thermoset resins are precision coated and designed to be low flow for optimal high fibre/resin content. Premix is generally known as Dough Moulding Compound (DMC), flow mix or Bulk Moulding Compound (BMC). Premix has been defined as "A fiber reinforced thermo set molding compound not requiring advancement of cure, drying of volatiles, or other processing after mixing to make it ready for use at the molding press". To this might be added "and which can be molded without reaction by products under only sufficient pressure to flow and compact the material". If the word "mixing" in the above is changed to "manufacture" the definition can apply equally to sheet molding compound.

| ۷. | Cost Estimation               |              |
|----|-------------------------------|--------------|
|    | Plant Capacity                | 1 TPD/Day    |
| *  | Land & Building (1000 sq.mt.) | Rs. 1.13 Cr. |
|    | Plant & Machinery             | Rs.51 Lacs   |
|    | W.C. for 3 Months             | Rs. 1.10 Cr. |
|    | Total Capital Investment      | Rs. 2.92 Cr. |
| 3  | Rate of Return                | 73%          |
| S  | Break Even Point              | 33%          |
| ı  | ************                  | *****        |

## LIQUID SULFUR TRIOXIDE (SO3) (EIRI-1748)

Sulfur trioxide (alternative spelling, sulphur trioxide) is the chemical compound with the formula SO3. In the gaseous form, this species is a significant pollutant, being the primary agent in acid rain. It is prepared on massive scales as a precursor to sulfuric acid. Gaseous SO3 is a trigonal planar molecule of D3h symmetry, as predicted by VSEPR theory. SO3 belongs to the D3h point group. In terms of electron-counting formalism, the sulfur atom has an oxidation state of +6 and a formal charge of +2 The Lewis structure consists of an S=O double bond and two S-O dative bonds without utilizing d-orbitals.

## Cost Estimation

| Oost Estimation                 |               |
|---------------------------------|---------------|
| Plant Capacity                  | 320 MT./Day   |
| Land & Building (10,000 Sq.mt.) | Rs. 6.50 Cr.  |
| Plant & Machinery               | Rs. 3.75 Cr.  |
| W.C. for 3 Months               | Rs. 3.06 Cr.  |
| Total Capital Investment        | Rs. 14.05 Cr. |
| Rate of Return                  | 39%           |
| Break Even Point                | 43%           |
| ***********                     | ******        |

## **EXTRUDER BASED INDUSTRIES** (41 Project Reports in CD Rs. 43,821

- B.O.P.P. FILM
- COLOUR MASTER BATCHES FOR VARIOUS PLASTICS
- DOUGH MOULDING COMPOUND (DMC), BULK MOULDING COMPOUND (BMC), SHEET MOULDING COMPOUND (SMC)
- **EXPANDED CELLULAR POLYETHYLENE** SHEET
- H D PF/PP BOX STRAPINGS
- HDPE/PP WOVEN SACKS (BAGS) HDPE FISHING NET
- H.D.P.E. AND FITTING PIPES
- HDPE PIPES AND PIPE FITTINGS
- INJECTION & BLOW MOULDED PLASTIC PRODUCTS
- LAMINATION OF CO-EXTRUSION MULTI LAYER FILM IN ROLL FORM
- MULTI LAYER CO-EXTRUSION, 3 LAYER FILM WITH LAMINATION & PRINTING
- NYLON GRANULES FROM NYLON WASTE
- NYLON NET FOR GIVING SHADE TO TEA PLANT IN NURSERY
- 15 PET GRANULES (DANA)
- PLASTIC INJECTION MOULDING PRODUCTS PLASTIC MAT
- 18. PLASTIC MOULDED FURNITURE
- 19. P.V.C. PIPES AND FITTINGS
- 20. PLASTIC FILMS AND SHEETS WITH PRINTING (FLEXO AND ROTO) LDPE/ HDPF/PP/HM/PVC
- PLASTIC GRANULES FROM FRESH RESIN
- 22. PLASTIC ROPE
- 23. PLASTIC CORRUGATED SHEET & BOXES
- 24. PLASTIC TOOTH PICK
- 25. POLY-VINYL FLOORING PLASTIC TARPAULIN
- POLYTHENE BAGS
- 28. PLASTTIC SUTLI OR POLYPROPYLENE
- PVC EXTRUSION PROFILES (WIRING CHANNELS)
- POLY CARBONATE SHEET
- PVC/PLASTICS (SOFT/RIGID) FILMS/ SHEET
- 32. POLYSTER FILM
- 33. P.V.C. FLEXIBLE PIPES
- 34. PVC NON-WOVEN MAT
- 35. P.V.C. CONDUIT PIPES
- POLYESTER ZIP FASTENERS POLYPROPYLENE & MULTIFILAMENT
- SPINNING YARN 38. PLASTIC DOORS AND WINDOWS
- TEFLON COATED ELECTRIC CABLES
- 40. uPVC DOORS & WINDOWS PROFILES
- 41 X-RAY FII M

Each Project Report covers in this CD contains Introduction, Uses, Market, Process with Produc formulae, Suppliers of Plant & Equipments and Rav Materials, Cost Economics with Profitability Analysis BEP, Resources of Finance etc

Price of this CD containing all above 41 Project Report s Rs. 43,821/-. Payable fully in advance through Bank Draft/M.O. in favour of ENGINEERS INDIA RESEARCH INSTITUTE, DELHI. Delivery within 3 days. (To Orde please dial: 098114-37895).

Patrons, deposit amount in EIRI Account ICICI BANK LTD.

CA-038705000994

## Start Your Own Industry

## PAN MASALA AND MOUTH FRESHNERS [EIRI- 1749]

Pan masala contains catechu, chuna flavouring agents and perfumery compounds etc. It refreshens the mouth and gives the feeling of cold in throat when taken in small amount. Panmasala is chewed either with pan or directly without any other thing. Pan masala is a mixture of nuts, seeds, herbs and spices which is served after meals in India. Various versions are also served in the Middle East and parts of Southeast Asia, where they are treated as mouth fresheners. Some households and restaurants make their own mixtures with special house ingredients, and it is also possible to purchase packaged pan masala from spice stores and many markets in India. Outside of India, it is available at Indian specialty stores and through importers.

### Cost Estimation

| Plant Capacity               | 300 Kgs./Day |
|------------------------------|--------------|
| Land & Building (500 Sq.mt.) | Rented       |
| Plant & Machinery            | Rs. 20 Lacs  |
| W.C. for 1 Month             | Rs. 32 Lacs  |
| Total Capital Investment     | Rs. 58 Lacs  |
| Rate of Return               | 59%          |
| Break Even Point             | 56%          |
| ************                 | ******       |

## **TOYOTA AUTOVEHICLES DEALERSHIP WITH AUTOMOBILE GARAGE** [EIRI-1750]

A car dealership or vehicle local distribution is retail level, based on a dealership contract with an automaker or its sales subsidiary. It employs vehicles. It may also provide maintenance services for cars, and employ automotive technicians to stock and sell spare automobile parts and process warranty claims Car out of town or on the edge of town centers and which relied on the skills of sales staff to sell vehicles. However, that model has begun to technology. TOYOTA has moved to create a utilizing the tank furnace. standard look for its dealerships around the world and to introduce 'product geniuses' to liaise with customers., TOYOTA has experimented with a hi-tech showroom that allows customers to configure and experience cars on 1:1 scale digital screens, has opened city centre brand stores to showcase its vehicles has opened city centre galleries where prospective customers can view cars that can only be ordered online.

## **Cost Estimation**

| Plant Capacity                | 1 Car/Day    |
|-------------------------------|--------------|
| Land & Building (4000 Sq.mt.) | Own          |
| Plant & Machinery             | Rs. 57 Lacs  |
| W.C. for 1 Month              | Rs. 3.39 Cr. |
| Total Capital Investment      | Rs. 6.61 Cr. |
| Rate of Return                | 28%          |
| Break Even Point              | 63%          |
|                               |              |

## ONION CHIPS & POWDER AND **GARLIC POWDER** (DEHYDRATION INDUSTRY) [EIRI-1751]

Onion (Allium cepa) belongs to the family Alliaceous. Onion is a vegetable crop consumed accessibility to improved goat technologies are all over the world but cannot be grown in abundance in every country. It is mainly grown for its bulb which is used for consumption flavouring and seasoning in almost every home As an item of world trade, onion ranks second in importance after tomatoes among the vegetables. In India, onion is extensively cultivated over a large area spread almost throughout the country. It is produced for bth domestic consumption as well as exports. The onions are regarded as a highly export oriented crop and earn valuable foreign exchange for the country. Though India produces a significant quantity of onions it is not regular and sufficient enough to meet the demands for both domestic equirement and exports.

### **Cost Estimation**

| Plant Capacity               | 1.60 Ton/Day |
|------------------------------|--------------|
| Land & Building (800 Sq.mt.) | Rs. 1.05 Cr. |
| Plant & Machinery            | Rs. 49 Lacs  |
| W.C. for 1 Month             | Rs. 36 Lacs  |
| Total Capital Investment     | Rs. 1.98 Cr. |
| Rate of Return               | 38%          |
| Break Even Point             | 48%          |
| **********                   | ******       |

## **GLASS BOTTLE MANUFACTURING [EIRI-1752]**

a business that sells new or used cars at the Glass is one of man's most valuable and versatile materials. About 700 different glass compositions are in commercial use. These are automobile salespeople to sell their automotive fabricated into tens of thousand of different articles that have combinations of properties for about a thousand essentially different uses Glass ware manufacturing occupies an important role in the glass manufacturing dealerships were traditionally large lots located industry. The process of glass ware manufacturing can be divided into the continuous production process and the discontinuous process. For former is a process change and a number of automotive in which processes from the input of raw manufacturers have shifted the focus of their materials through the moulding of glass are franchised retailers on to branding and conducted continuously and in equipose

## Cost Estimation

| 7 | Occi Ecumation                |              |
|---|-------------------------------|--------------|
| 0 | Plant Capacity                | 25 MT./Day   |
| S | Land & Building (6000 Sq.mt.) | Rs. 8 Cı     |
| t | Plant & Machinery             | Rs. 3.16 Cı  |
| 9 | W.C. for 3 Months             | Rs. 2.30 Cı  |
| t | Total Capital Investment      | Rs. 13.92 Ci |
|   | Rate of Return                | 319          |
| Э | Break Even Point              | 48%          |
|   |                               |              |

## **GOAT FARMING [EIRI-1753]**

Goats are among the main meat-producing Juglans cinerea. animals in India, whose meat (chevon) is one of the choicest meats and has huge domestic demand. Due to its good economic prospects goat rearing under intensive and semi-intensive system for commercial production has been gaining momentum for the past couple of years. High demand for goat and its products with

potential of good economic returns have been deriving many progressive farmers businessmen, professionals, ex-servicemer and educated youths to take up the goat enterprise on a commercial scale. The emerging favourable market conditions and easy also catching the attention of entrepreneurs. A number of commercial goat farms have beer established in different regions of the country.

| Cost Estimation               |                |  |
|-------------------------------|----------------|--|
| Land & Building (7200 sq.ft.) | Rs. 85.30 Lacs |  |
| Plant & Machinery             | Rs. 2.25 Lacs  |  |
| W.C. for 1 Month              | Rs. 1.69 Lacs  |  |
| Total Capital Investment      | Rs. 92.64 Lacs |  |
| Rate of Return                | 19%            |  |
| Break Even Point              | 53%            |  |

## SANITARY NAPKINS (DISPOSABLE) [EIRI- 1754]

Sanitary napkin is a hygiene absorbent produc used by women during menstrual periods. It is a product of technical textile. A sanitary napkin sanitary towel, sanitary pad, menstrual pad maxi pad, or pad is an absorbent item worn by a woman while she is menstruating, recovering from vaginal surgery, for lochia (post birth bleeding), abortion, or any other situation where it is necessary to absorb a flow of blood from a woman's vagina. The menstrual cycle stars fo young women between the ages 11-17 frequently around 12-13 years. On average a woman experiences a period every 28th Day 12-13 times in a vear. A menstrual period normally lasts 3-7 Days. The loss of fluid in a period is on average half a cup or 65-80 ml The menstrual pattern is influenced by giving birth and contraceptive methods. Menstruation lasts until menopause at the age 45-55. The feminine hygiene products market has evolved over more than 100 years.

## **Cost Estimation**

| Plant Capacity             | 1,60,000 Nos/Day  |
|----------------------------|-------------------|
| Land & Building (1500 Sq.m | nt.) Rs. 2.15 Cr. |
| Plant & Machinery          | Rs. 3.60 Cr.      |
| W.C. for 3 Months          | Rs. 1.32 Cr.      |
| Total Capital Investment   | Rs. 7.24 Cr.      |
| Rate of Return             | 34%               |
| Break Even Point           | 51%               |
|                            |                   |

## WALNUT PROCESSING PLANT [EIRI-1755]

A walnut is the nut of any tree of the genus Juglans (Family Juglandaceae), particularly the Persian or English walnut, Juglans regia. It is used for food after being processed while green for pickled walnuts or after full ripening for its nutmeat. Nutmeat of the eastern black walnut from the Juglans nigra is less commercially available, as are butternut nutmeats from

| Plant Capacity            | 15 Tons/Day   |  |
|---------------------------|---------------|--|
| Land & Building (2 Acres) | Rs. 1.94 Cr.  |  |
| Plant & Machinery         | Rs. 2.62 Cr.  |  |
| Total Capital Investment  | Rs. 26.32 Cr. |  |
| Rate of Return            | 45%           |  |
| Break Even Point          | 32%           |  |
| ****************          |               |  |

## Top Industries to Start

## **COLD STORAGE PLANT** [EIRI-1757]

All fruits and vegetables require specialized pos harvest treatment, appropriate temperature and relative humidity for their storage. Establishment of cold storage provides refrigerated storage and preservation facilities for several fruits, vegetables & flowers. Because of technology advancements and logistic strategies, the cold storage of perishable items has become an important stage in the distribution between manufacturers/processors and retail locations The cold storage will ensure the increased availability and improved quality of high value perishable fruits and vegetables for both export and local sale, which would otherwise perish or deteriorate. This project is designed for storing of potatoes and apples/kinnu etc. but it can be used to store multiple products, stored in different compartments of the unit, where relative temperatures for respective products can be maintained. The major clientele of this business will be the export houses and the local trading and marketing units of potato and apple/ kinnu. The project will further aim at storing fruits & vegetables even during off-seasons. The project will ultimately assist the clientele in maintaining market price equilibrium throughout the year for potatoes. Kashmir has rightly been environment and salubrious climate has provided greater facilities for horticulture industry to grow more rapidly. The apparently growing fruit industry has changed the social helped its people in reshaping their economy to some extent.

## Cost Estimation

| Plant Capacity            | 5000 MT.     |
|---------------------------|--------------|
| Land & Building (2 Acres) | Rs. 4.32 Cr. |
| Plant & Machinery         | Rs. 3.26 Cr. |
| W.C. for 1 Month          | Rs. 12 Lacs  |
| Total Capital Investment  | Rs. 7.86 Cr. |
| Rate of Return            | 19%          |
| Break Even Point          | 62%          |

## **KRAFT PAPER FROM WASTE CARTON BOXES [EIRI-1758]**

Paper form a commodity of prime importance to Day from the parts of view of mass Cellulose is a natural carbohydrate high communication, education, and industrial and polymer (polysaccharide) consisting of economic growth. The art of paper making was first discovered in China in and around 2nd linkage to form long molecular chains. that are century, B.C. pan where it travelled slowly west ward and reached the prantiens of Europe. By 1. Alpha, 2. Beta, 3. Gamma. Alpha cellulose the end of 14th century, a member of paper mill has the highest degree of Polymerization (DP). existed in Europe, particularly in Spain, Italy, It is insoluble in strong sodium hydroxide France and Germany. the invention of printing solution. The beta and gamma form have much in 1956 brought a vastly in creased demand for lower DP and are known as hemicelluloses. paper and paper-manufacturing was introduced to England, America followed in 1690 Agricultural residues, such as bagasse, rice husk, wheat husk jute sticks, grasses, etc are fast becoming popular materials for pape making. considerable attention is being giver to the utilization of various agricultural by products for preparing pulp for pape manufacture landable efforts are being make n this direction. Paper production requires a

disintegration of the bulky fibrous material to individual or small agglomerate fibres. This is called pulping.

## **Cost Estimation**

| Plant Capacity             | 100 MT./Day    |
|----------------------------|----------------|
| Land & Building (16 Acres) | Rs. 31.95 Cr.  |
| Plant & Machinery          | Rs. 51 Cr.     |
| W.C. for 3 Months          | Rs. 25.40 Cr.  |
| Total Capital Investment   | Rs. 111.49 Cr. |
| Rate of Return             | 32%            |
| Break Even Point           | 52%            |

## **GUAR GUM [EIRI-1759]**

The districts in Haryana indulge d in the production of guar are Bhiwani, Sirsa, Mahendragarh and Rewari and the districts in Guiarat are Kutch Banaskantha Mehsana Sabarkantha and Ahmadabad, Jodhpur city in Ra jasthan is one of the major processing centers of guar gum in India. Guar also known as cluster bean (Cyamopsis tetragonoloba (L.) Taub) is a drought hardy leguminous crop. Guar is being grown for seed, green fodder, vegetable and green manuring. It is an annual plant, about 4 feet high, vertically, stalked, with large leaves and clusters of pods. Each pod is about 5-8 cm long and has on an average 6-9 small grayishwhite pea shaped seeds. The pods are used as a green vegetable or as a cattle feed besides described as, the land of fruits. Its land the industrial extraction of guar gum. Guar seed consists of major three portions viz. the seed coat,the endosperm and the innermost proteinacious portion, the germ. The endosperm is mechanically separated from seeds which and economic status of our rural Kashmir and yields 35-42% of gum(galactomannan). The left out portion, i.e., the outer seed coat and the germ together constitute guar meal.

## Cost Estimation

|   | Plant Capacity  | 5 TPD/Day    |
|---|---|--------------|
| 1 | Land & Building (1 Acre) Plant & Machinery W.C. for 3 Months Total Capital Investment | Rs. 2 Cr.    |
| 1 | Plant & Machinery   | Rs. 1.12 Cr. |
|   | W.C. for 3 Months   | Rs. 2.53 Cr. |
| 1 | Total Capital Investment  | Rs. 5.75 Cr. |
| ı | Rate of Return  | 90%          |
| 1 | Break Even Point  | 25%          |
|   |   |              |

## ALPHA CELLULOSE POWDER FROM COTTON WASTE **EIRI-1645**]

anhydro glucose units joined by an oxygen essentially linear cellulose exist in three form.

## **Cost Estimation**

| ١. | Plant Capacity                | 2 MT/Day    |
|----|-------------------------------|-------------|
| е  | Land & Building (1500 Sq.Mt.) | Rs. 2.57 Cr |
| е  | Plant & Machinery             | Rs. 90 Lacs |
| r  | W.C. for 3 Months             | Rs. 93 Lacs |
| n  | Total Capital Investment      | Rs. 4.51 Cr |
| v  | Rate of Return                | 16%         |
|    | Break Even Point              | 65%         |
| е  | **********                    | *********   |
|    |                               |             |

## **CAST POLY PROPYLENE** FILMS (CPP FILM) [EIRI-1646]

The term CPP is used in the plastics industry to describe polypropylene-based films produced by a cast extrusion process (Cast Polypropylene). Although there are some CPF films used for hygiene applications and synthetic paper (usually involving fillers and other additives), the term CPP is usually used to refer to high clarity films targeting lamination, metallization and packaging applications.

### **Cost Estimation**

| Plant Capacity                | 16.67 MT/Day  |
|-------------------------------|---------------|
| Land & Building (4000 Sq.Mt.) | Rs. 2.45 Cr.  |
| Plant & Machinery             | Rs. 2.80 Cr.  |
| W.C. for 2 Months             | Rs. 9.22 Cr.  |
| Total Capital Investment      | Rs. 14.77 Cr. |
| Rate of Return                | 46%           |
| Break Even Point              | 34%           |

## SPICES GRINDING [EIRI-1647]

Spices which are basically plant products have a definite role to play in enhancing the taste flavour, relish or piquancy of any food most of the spices are pagrant, aromatic and pangent. They comprise seeds, bartes rhizome, leaves fruits and other parts of plants, which belong to varigated species and genera since time immorial, india in renamed to be the have of spices. Most important spices like black pepper (king of spices) cardamom (queen of spices) cardamon (queen of spices), ginger, chilies and turmeric which are produced in India import it great reputation and these constitute. The major group of spices

## **Cost Estimation**

| Plant Capacity               | 2 MT/Day     |
|------------------------------|--------------|
| and & Building (1500 Sq.Mt.) | Rs. 1.30 Cr. |
| Plant & Machinery            | Rs. 1.15 Cr. |
| Total Capital Investmen      | Rs. 4.40 Cr. |
| Rate of Return               | 54%          |
| Break Even Point             | 49%          |
|                              |              |

## **DOOR HINGES (MILD STEEL** AND STAINLESS STEEL) [EIRI-1648]

Hinges have extensive applications in joining doors, windows and similar other structures requiring a movement of one flank with respect to a fixed frame. In housing, the doo flanks can have an angular movement with respect to the door frames of wood or steel or aluminium. Its function is to joint one part to the other.

## **Cost Estimation**

| Plant Capacity                | 400 Kgs./Day   |
|-------------------------------|----------------|
| Land & Building (1000 Sq.Mt.) | Rs. 1.75 Cr.   |
| Plant & Machinery             | Rs. 48.20 Lacs |
| Total Capital Investment      | Rs. 2.97 Cr.   |
| Rate of Return                | 20%            |
| Break Even Point              | 58%            |

Deposit amount in EIRI Account AXIS BANK LTD, 054010200006248 (IFS Code: UTIB0000054) or ICICI BANK LTD. CA-038705000994 (RTGS/NEFT/IFSC Code: ICIC0000387)

## Best Industries to Start and Grow

## **CASHEW NUT PROCESSING** [EIRI-1649]

Cashew (Anacardium occidentale L.) a native of Eastern Brazil introduced to India just as other commercial crops like Rubber, Coffee. Tea etc. by the Portuguese nearly five centuries back. The first introduction of cashew in India was made in Goa from where it spread to other parts of the country. In the beginning it was mainly considered as a crop for afforestation and soil binding to check erosions. The nuts, apple and other by products of this crop are of commercial importance. Though its commercial exploitation began from the early 60's, marginal lands and denuded forests were the areas set apart for the plantation development.

### **Cost Estimation**

| Land & Building (1000 Sq.Mt. | ) Rs. 1.39 Cr. |
|------------------------------|----------------|
| Plant & Machinery            | Rs. 58.35 Lacs |
| W.C. for 1 Month             | Rs. 84.27 Lacs |
| Total Capital Investment     | Rs. 2.90 Cr.   |
| Rate of Return               | 32%            |
| Break Even Point             | 54%            |
|                              |                |

## **BIO GAS PRODUCTION & BOTTLING PLANT [EIRI-1650]**

Energy is becoming a scarce and costly input in the world. Oil which accounts for a sizeable portion of our energy consumption, has been making a very heavy tax on our foreign exchange resources. Other than coal, we must also find alternate resources of energy centered around solar, wind, tidal and bio-gas An effective bio-gas programme leads to efficient use of cow dung for gas recovery and partial supplement to plant nutrient requirement. Bio-gas programme leads to improvement in rural living including rural sanitation. Conventional bio-gas digesters set up in India were predominantly of the Khadi Village Industries Commission Model.

## Cost Estimation

| Plant Capacity         | 1500 Cub | ic Meter/Day |
|------------------------|----------|--------------|
| Land & Building (2000  | Sq.Mt.)  | Rs. 1.40 Cr. |
| Plant & Machinery      |          | Rs. 1.00 Cr. |
| W.C. for 3 Months      |          | Rs. 40 Lacs  |
| Total Capital Investme | ent      | Rs. 4.86 Cr. |
| Rate of Return         |          | 26%          |
| Break Even Point       |          | 50%          |
| ********               | ******   | *****        |

## **ISOBGOL PROCESSING UNIT** [EIRI-1651]

Isobgol (psyllium) is a natural gift to India especially to the North Gujarat and the southern part of Rajasthan since in no other part of the world the climatic conditions are such that which are favourable for growing Isobgol crop. Isobgol is a Persian name which means horse's ear. (Isob means horse any gol means ear) The name completely suits the description of isobgol seed, as it is very much resembles horse's ear. The Isobgol seed has Two parts, the above thin white laver

Patrons, deposit amount in EIRI Account
STATE BANK OF INDIA CA-30408535340 (RTGS/NEFT/IFSC Code: SBIN0001273)

known as isobgol 'hush' or'sat' isobgol' and the inner red known as gola. Cost Estimation

| J COOL Edilliano             | ***            |
|------------------------------|----------------|
| Plant Capacity               | 1 MT/Day       |
| Land & Building (600 Sq.Mt.) | Rs. 73 Lacs    |
| Plant & Machinery            | Rs. 14.75 Lacs |
| W.C. for 2 Months            | Rs. 22.56 Lacs |
| Total Capital Investment     | Rs. 1.16 Cr.   |
| Rate of Return               | 56%            |
| Break Even Point             | 39%            |

## 10 MW GRID INTERACTIVE **SOLAR POLYCRYSTALLINE PV POWER PLANT [EIRI-1652]**

Grid interconnection of photovoltaic (PV) power generation system has the advantage of more effective utilization of generated power. However, the technical requirements from both the utility power system grid side and the PV system side need to be satisfied to ensure the safety of the PV installer and the reliability of the utility grid. Clarifying the technical requirements for grid interconnection and solving the problems are therefore very important issues for widespread application of PV systems. Grid interconnection of PV systems is accomplished through the inverter, which convert DC power generated from PV modules to AC power used for ordinary power supply for electrical equipments.

| Cost Estillation         |                      |  |
|--------------------------|----------------------|--|
| Plant Capacity           | 10 MEGA WATTS        |  |
| Land & Building (120000  | Sq.Mt.) Rs. 5.24 Cr. |  |
| Plant & Machinery        | Rs. 56 Cr.           |  |
| W.C. for 2 Months        | Rs. 26 Lacs          |  |
| Total Capital Investment | Rs. 61.86 Cr.        |  |
| Rate of Return           | 21%                  |  |
| Break Even Point         | 60%                  |  |
| l                        |                      |  |

## **GROUND CALCIUM CARBONATE MICRONIZATION** PLANT [EIRI-1653]

Calcite is a carbonate of calcium (CaCO3) containing 56% CaO and 44% CO2. It is one of the important industrial minerals also known as 'Calc Spar'. Pure crystallised transparent variety of calcite is known as 'Iceland Spar' which is used as Nicol prism in optical instruments using polarised light Calcite is the most abundant crystalline form of calcium carbonate (CaCO3) Calcite limestone refers to a high-calcium limestone. As for hardness of calcite is concerned, pure calcite has a hardness of 3 Mohs, whereas naturally occurring limestone's lie in the range of 2-4 Mohs. Regarding the formation and occurrence of limestone/calcite mineral, this is widely distributed throughout the world in deposits of varying sizes & degrees of purity

Cost Estimation (US DOLLAR)

|   | Cost Estillation (os E        | OLLAN)         |
|---|-------------------------------|----------------|
|   | Plant Capacity                | 30 MT/Day      |
|   | Land & Building (1500 Sq.Mt.) | US\$ 2.17 Lacs |
|   | Plant & Machinery             | US\$ 1.78 Lacs |
|   | W.C. for 2 Months             | US\$ 97 Th.    |
| ١ | Total Capital Investment      | US\$ 6.88 Lacs |
| 1 | Rate of Return                | 24%            |
| ı | Break Even Point              | 58%            |
| Į | ********                      | ******         |

## **Hi-Tech Projects**

Date of Posting 24th to 30th of Every Month Weight of Magazine- Upto 48 Gram) An Industrial Monthly Magazine on Hi-Tech Projects & developed and underdeveloping Technologies with lucrative Project opportunities

## **Editor**

Sudhir Gupta

**Asst. Editor** 

Ankur Gupta

## SUBSCRIPTION RATES FOR INDIA

Single Copy Rs. 20/-One Year Rs. 225/-Three Years Rs. 650/-

(Add Rs. 100/- for outstation cheques Please make the Draft/Cheque in favour of "Engineers India Research

Institute, Delhi"

## **FOR OVERSEAS**

Single Copy US\$ 10/-One Year US\$ 120/-

## **CAUTION**

Project Reports/Profiles provided in this issue had been prepared on datas available at the time of preparing these reports. Entrepreneurs/Industrialists are requested to please update the data before venturing into any project mentioned herein.

## **PUBLISHERS**



## ENGINEERS INDIA RESEARCH INSTITUTE

1449 Nai Sarak, Main Road, Delhi - 110006 (INDIA) Ph: 9111-23916431, 23918117 45120361, 9811437895, 9811151047 E-Mail: eiritechnology@gmail.com, eiriprojects@gmail.com Website: www.eiriindia.org

www.eiribooksandprojectreports.com

Patrons may also directly transfer the fund for Project Reports & Books in following EIRI current accounts:

HDFC BANK - 05532020001279 (RTGS/NEFT/IFSC CODE: HDFC0001981)

ICICI BANK - 038705000994 (RTGS/NEFT/IFSC CODE: ICIC0000387)

AXIS Bank Ltd. - 054010200006248 (RTGS/NEFT/IFSC CODE:UTIB0000054)

UNION BAK OF INDIA -307201010015149 RTGS/NEFT/IFSC CODE: UBIN0530727)

STATE BANK OF INDIA -30408535340 (RTGS/NEFT/IFSC CODE: SBIN0001273)

AND SMS US ON PH. +91 9811437895

## Start Your Own Industry

## **SOYA MILK AND PANEER** [EIRI-1654]

Soyabeans are very much popular as food crop in most of the countries all over the world where a large number of food products are prepared form soyabean seeds. As edible oil milk and milk products giving sources crop the soyabeans are getting wide acceptance. In India too since last few decades. Souvabean seeds have a high nutritional composition; and can be converted in to various states, tastes, colours, flavours and other quality substances. As far as the use of sovabean is concerned it has taken a place from soap industry to food industries like. The soya milk, in particular has been developed like a boon for human beings as large. The specialty lies in the fact that in the reasons when traditional cow milk buffalo milk is not available in sufficient quantity, this milk serves the purpose almost equitably to other animal milk type. Soybeans possess a very high nutritional value.

### **Cost Estimation**

| Plant Capacity           | 1 MT/Day    |
|--------------------------|-------------|
| Land & Building          | Rented      |
| Plant & Machinery        | Rs. 7 Lacs  |
| W.C. for 1 Month         | Rs. 9 Lacs  |
| Total Capital Investment | Rs. 18 Lacs |
| Rate of Return           | 63%         |
| Break Even Point         | 61%         |

## **COCOA BUTTER AND COCOA POWDER WITH CULTIVATION** [EIRI-1655]

Cocoa Powder (Cocoa) is the food prepared by pulverizing the material remaining after the part of fat (Cocoa Powder) is removed from chocolate liquor. The V.S.chocolate standards define three types of cocos based on their fat content. These are (a) Breakfast, or high fat cocoa containing not less than 22% fat. (b) Cocoa, or medium fat cocoa containing less than 22% but more than 10%. (c) Low fat cocoa, containing less than 10% fat. Cocoa powder production to Day is an important part of the cocoa and chocolate industry, because of increased consumption of chocolate flavoured products.

## **Cost Estimation**

| Plant Capacity              | 5 MT/Day     |
|-----------------------------|--------------|
| Land & Building (400 Acres) | Rs. 21.25 Cr |
| Plant & Machinery           | Rs. 2.29 Cr  |
| W.C. for 3 Months           | Rs.3.36 Cr   |
| Total Capital Investment    | Rs. 27.21 Cr |
| Rate of Return              | 67%          |
| Break Even Point            | 22%          |
|                             |              |

## **AUTOMATIC LINE FOR** PROCESSING FRESH GINGER INTO DRY GINGER, GINGER. **OIL, PASTE, POWDER & GINGER JUICE [EIRI-1656]**

A genus of rhizomatous herbs distributed in the tropics of the old world, chiefly in India, East Asia and Malaysia. Fourteen, species are reported to occur in India Z-official, which

is the main source of ginger, is cultivated on around 1984-1985 by a Karachi based firm a large scale in India. Bangladesh, Taiwan, Then a factory was installed in Gujranwala Jamaica, Nigeria and Sieria, Leone, from and then with the passage of time now there which it is exported to other countries the are some main 7units producing plastic world and ginger is cultivated also for internal chairs, tables, baby products, etc Day and consumption in Sri Lanka (Ceylon) and nights. Due to low purchasing power people several East Asiatic countries and the crop in Pakistan found this product cheap. has been introduced into Queens hand in associated with warranty covering the risk of Australia mainly for pickling. Ginger is consumers. Customer bank is increasing Day mentioned in the early literature of China and by Day with the penetration of companies, India as a spice. Thus it is one of the earliest by introducing new and economical models, of known spices. In the 16th century, the variety of colors, exports to Afghanistan etc Spaniards introduced it into the West Indies and Mexico.

### Cost Estimation

| Land & Building (2.5 Acres) | Rs. 5.75 Cr.  |
|-----------------------------|---------------|
| Plant & Machinery           | Rs. 2.50 Cr.  |
| Total Capital Investment    | Rs. 16.93 Cr. |
| Rate of Return              | 36%           |
| Break Even Point            | 39%           |

## INSTANT FOOD MIX (IDLI MIX, DOSA MIX, SAMBAR MIX, VADA MIX GULABJAMUN MIX, **DHUKLA MIX ETC.) [EIRI-1657]**

Modern age has evolved an immense relish for fast food items which have become quite prevalant in view of their variety and palatability. Their demand is also enhancing at a tremendous pace. Among such food item, Dhokla, Dosa, Sambar, Gulab Jamun, Vada mix etc. constitute. Instant food mix. Their speciality owes to the significant progress in food technology. One great speciality is the facile availability of these food items at various shapes, vendors, and mobile food snacks parlours & these are very economical items.

**Cost Estimation** Plant Capacity 600 KGS/Day Land & Building (6000 Sq.Mt.) Rs. 50 Lacs Plant & Machinery Rs. 12 Lacs Total Capital Investment Rs 95 99 Lacs 98% Rate of Return Break Even Point 29%

## PLASTIC MOULDED CHAIRS (P.P.) [EIRI-1658]

Due to the very low consumption as compared to developed countries and even in India, a large gap is to be filled by introducing new and cost effective products. Customers with low purchasing power don't have any option other than plastic furniture. Middle and lower classes in Pakistan is major buyer and these classes are 65% of total population. Also there are very few players overseas countries. in this business. The business of Molded Furniture has marked its place in the country through growth during the last ten years. This growth has opened up new opportunities. The prime reason for this is awareness about the product. Along with that, companies are offering conditional warranty of plastic chairs minimizing risk of customer. Molded Furniture is basically produces in developed countries to be used as Lawn Furniture and outdoor restaurants. As trends are from developed countries, it was introduced in Pakistan

### Cost Estimation

| Plant Capacity             | 400 Nos./Day |
|----------------------------|--------------|
| Land & Building (Existing) | Rs. 25 Lacs  |
| Plant & Machinery          | Rs. 1.50 Cr. |
| W.C. for 1 Month           | Rs. 7 Lacs   |
| Total Capital Investment   | Rs. 1.87 Cr. |
| Rate of Return             | 9%           |
| Break Even Point           | 73%          |

## **KURKURA AND NAMKEEN** [EIRI-1659]

Namkeen products are in demand from over many years in India and are being exporting to many countries. Dal Moth. Chanachur & Bhujia are the important names inhancing the flavour & taste as processed foods. These are food products having no historical background & becomes in market and in social & cultural synonym as the society became more advanced. Initially in long-long ago, people did not heard the name of Dal moth, chur or Bhujia like food products. But now Days it is well known not in India but world wide. These are mainly consumed during breakfast period & are very much during social & cultural periods. These are used as tasty & flavored food as well as in medicinal way, however, a little it may be, according to ayurveda) because of their carminative stimulative digestive properties India produces almost all these types of salty processed food products of grains all these types of salty processed food products of grains like Grams. Pulses etc. It aid in digestion and adsorption of food possesses anthelmintic and antiseptic properties. The main raw materials for these products are Gram pulses & spices. The various food additives & colours may be used to provide sophistications in the products. the raw material are frequency available in India. These salty food products get a broad market in foreign countries. These products are very much popular not only in India but also

## **Cost Estimation**

| Plant Capacity                | 20 MT/Day     |
|-------------------------------|---------------|
| Land & Building (2000 sq.mt.) | Rs. 3.60 Cr.  |
| Plant & Machinery             | Rs. 1.75 Cr.  |
| W.C. for 1 Month              | Rs. 4.70 Cr.  |
| Total Capital Investment      | Rs. 10.20 Cr. |
| Rate of Return                | 47%           |
| Break Even Point              | 36%           |

HDFC BANK - 05532020001279 (RTGS/NEFT/IFSC CODE: HDFC0001981) Br: Nai Sarak, Delhi - 110006

## Top Industries to Start

## SORBITOL FROM CORN [EIRI-1660]

Sorbitol, a polyol (sugar alcohol), is a bulk sweetener found in numerous food products In addition to providing sweetness, it is an excellent humectant and texturizing agent. Sorbitol is about 60 percent as sweet as sucrose with one-third fewer calories. It has a smooth mouthfeel with a sweet, cool and pleasant taste. It is non-cariogenic and may be useful to people with diabetes. Sorbitol has been safely used in processed foods for almost half a century. It is also used in other products, such as pharmaceuticals and cosmetics. D-Soribitol, CH2OH (CHOH) 4CH2OH (D-glucitol, L-gulitol), is a hexahvdric alcohol with a 6-carbon atom straight-chain that contains six hydroxy gropups, and has a molecular weight of 182.17.

### Cost Estimation

| Plant Capacity            | 20 MT/Day     |
|---------------------------|---------------|
| Land & Building (4 Acres) | Rs. 6 Cr.     |
| Plant & Machinery         | Rs. 17 Cr.    |
| W.C. for 3 Months         | Rs. 7.98 Cr.  |
| Total Capital Investment  | Rs. 31.69 Cr. |
| Rate of Return            | 16%           |
| Break Even Point          | 68%           |
|                           |               |

## **POLYTHENE ROLLED SHEET** [EIRI-1661]

Over 60 million tons of poly(ethene), ofter known as polyethylene and polythene, is manufactured each year making it the world's most important plastic. Its uses include film, packaging and containers, from bottles to buckets. Polyethylene is a thermosetting white solid high temperature resistance excellent resistance to chemical and to creep, high impact and tensile strength. The density of polyethylene is effected by the shape and spacing of the molecular chain, low density material, have highly branched and widely spaced chain, whereas high density materials have comparatively straight and closely aligned chain. Polyer of the latter type are called linear.

## **Cost Estimation**

| Plant Capacity                | 5 Ton/Day    |
|-------------------------------|--------------|
| Land & Building (1000 Sq.Mt.) | Rs. 1.44 Cr. |
| Plant & Machinery             | Rs. 42 Lacs  |
| W.C. for 1 Month              | Rs. 1.19 Cr. |
| Total Capital Investment      | Rs. 3.12 Cr. |
| Rate of Return                | 49%          |
| Break Even Point              | 37%          |

## SUPERABSORBENT POLYMER (POLY ACRYLIC ACID BASED) [EIRI-1662]

Superabsorbent polymers are primarily used as an absorbent for water and aqueous solutions for diapers, adult incontinence products, feminine hygiene products, and similar applications. Undoubtedly, in these

Patrons, deposit amount in EIRI Account ICICI BANK LTD. CA-038705000994 (RTGS/NEFT/IFSC Code: ICIC0000387)

replace traditional absorbent materials such as cloth, cotton, paper wadding, and cellulose fiber. Commercial production of super absorbent polymers began in Japan in 1978. for use in feminine napkins. This early superabsorbent was a crosslinked starch-gpolyacrylate. Polyacrylic acids eventually dyes in the pearl coating compound. replaced earlier superabsorbents, and is the primarypolymer employed for superabsorbent polymers. European countries further developed the superabsorbent polymer for use in baby diapers. This first diapers employing this technology used only a small amount of polymer, approximately 1-2 g. In 1983, a thinner diaper using 4-5 grams of polymer and less fluff was marketed in Japan.

### **Cost Estimation**

| Plant Capacity            | 10 MT/Day     |
|---------------------------|---------------|
| Land & Building (1 Acrer) | Rs. 2.40 Cr.  |
| Plant & Machinery         | Rs.1.90 Cr.   |
| W.C. for 2 Month          | Rs. 10.12 Cr. |
| Total Capital Investment  | Rs. 14.70 Cr. |
| Rate of Return            | 38%           |
| Break Even Point          | 36%           |
| ***********               | ******        |

## **BISCUIT (ASSORTED) AUTOMATIC PLANT** [EIRI-1663]

Around the world Biscuits is the principal food and provides more nutrients than any othe single food source. The value of grain in the world used for human consumption is over 2, 3 times of the value of the world iron and steel production. Although only 14% of the grain in the world is handled through internationa channels, cereal grains make up more than half of all the goods in overseas trade. The same Biscuit is made up form the word 'BIS' Which means twice and 'Cut' means Balled suggesting that product should be twice balled. The Biscuit were originally developed to meet the requirement of longer life of the barley products and for this, purpose, the dough were made up and twice balled to make them moisture free to improve their keeping qualities. The Biscuit manufacturing was started a century ago mainly to meet the requirement of European Travelers.

## **Cost Estimation**

| Plant Capacity               | 5 MT/Day       |
|------------------------------|----------------|
| Land & Building (1000 Sq.Mt. | ) Rs. 1.47 Cr. |
| Plant & Machinery            | Rs. 82.75 Lacs |
| W.C. for 1 Month             | Rs. 53.93 Lacs |
| Total Capital Investment     | Rs. 2.98 Cr.   |
| Rate of Return               | 63%            |
| Break Even Point             | 43%            |
|                              |                |

## SYNTHETIC PEARL COATING ON POLYSTYRENE BEADS [EIRI-1664]

Pearl is one of the highly elegant variety of gem among others. Though the availability of pearl (natural) is limited in market. This is so costly that only limited number of people can purchase the same. For general categories of people it is the synthetic pearl which is largely available and used by the people.

applications, superabsorbent materials will The plastic beads of suitable size is manufactured by plastic manufactures, which are either dip coated or spray coated by suitable coating material giving the same pearly effect on it. It gives same shining like natural pearl. It can be prepared in various shades depending on the addition of requisite

### Cost Estimation

| Plant Capacity                | 4 Ton/Day    |
|-------------------------------|--------------|
| Land & Building (1000 Sq.Mt.) | Rs. 1.20 Cr. |
| Plant & Machinery             | Rs. 50 Lacs  |
| W.C. for 1 Month              | Rs.1.08 Cr.  |
| Total Capital Investment      | Rs. 2.89 Cr. |
| Rate of Return                | 70%          |
| Break Even Point              | 29%          |
|                               |              |

## SODIUM SULPHIDE [<u>EIRI-1665</u>]

Sodium sulphide, Na2s, is an organic chemical that has attained as very important position in the organic chemical industry. It is an important sulphide of sodium. It is widely used in leather industry for removing hairs from the hide. It finds extensive applications in textile and also synthetics of sulphur dyes and reduction of amino compounds. It is also used in paper industry, lothography and engraving manufacture of sulphur black dyes etc. There was no production of sodium sulphide in India before the war, all the requirements being met from imports. Arrangements for the import of sodium sulphide failed and considerably difficulty was experienced by the textile and terming industries in meeting the requirements of the defense serious for textiles and leather.

## Cost Estimation

| Plant Capacity            | 50 MT/Day     |
|---------------------------|---------------|
| Land & Building (2 Acres) | Rs. 4.30 Cr.  |
| Plant & Machinery         | Rs.1.85 Cr.   |
| W.C. for 3 Months         | Rs. 5.08 Cr.  |
| Total Capital Investment  | Rs. 11.45 Cr. |
| Rate of Return            | 51%           |
| Break Even Point          | 35%           |

## SORBITOL FROM CORN [EIRI-1666]

Sorbitol, a polyol (sugar alcohol), is a bulk sweetener found in numerous food products. In addition to providing sweetness, it is an excellent humectant and texturizing agent. Sorbitol is about 60 percent as sweet as sucrose with one-third fewer calories. It has a smooth mouthfeel with a sweet, cool and pleasant taste. It is non-cariogenic and may be useful to people with diabetes. Sorbitol has been safely used in processed foods for almost half a century. The product has got great deand in future.

| Plant Capacity                | 5 MT/Day     |  |  |  |
|-------------------------------|--------------|--|--|--|
| Land & Building (4000 sq.mt.) | Rs. 1.83 Cr. |  |  |  |
| Plant & Machinery             | Rs. 3.41 Cr. |  |  |  |
| W.C. for 3 Months             | Rs. 1.54 Cr. |  |  |  |
| Total Capital Investment      | Rs. 6.88 Cr. |  |  |  |
| Rate of Return                | 50%          |  |  |  |
| Break Even Point              | 41%          |  |  |  |
| ***************               |              |  |  |  |

# Market Survey Cum Detailed Techno Economic Feasibility Reports

- To get Loan/Finance from Banks/Finacial Institutes.
- To set up your own Industry/Unit
- To have Detailed & Exhaustive Data on any Project.



- \* EIRI Project Reports are prepared by highly qualified & experienced consultants & Market Research and Analysis supported by a panel of Experts and Computerised.
- <sup>†</sup> Data provided are reliable and uptodate collected from manufacturers/suppliers, plant already commissioned in India.

A complete List of Industrial Project Reports are given on www.eiribooksandprojectreports.com

## **EACH DETAILED PROJECT REPORT CONTAINS:**

- **☞INTRODUCTION**: Project Mix, Uses & Applications, Quality Control Measure & Their Introduction for Attaining Required Properties Economy & Productivity Competence.
- ◆MARKET SURVEY: Market Position, Installed Capacity Production, Anticipated Demand, Present Manufacturers, Statistics of Imports & Exports, Estimated Demand, Demand & Supply Gap (If available), LI/IL Issued Recently
- **☞PROCESS OF MANUFACTURE:** Inventory Controls & Tests, Comparative Study of Process for Manufacturing the Product, Formulations, Process Flow Sheet Diagram, Process Detail in Stages from Raw Materials to Finished Products
- **☞RAW MATERIALS**: Raw Material Specifications, Market Codes & Raw Material Prices, Sources of Procurement of Raw Materials [Imported/Indigenous]
- **▼PLANT & MACHINERY:** Range of Machineries Required, Detailed Specifications of Machines & Equipments, Prices od Machineries, Suppliers of Plant and Machineries.
- **Construction** ← Total Land Area Requirement with Rates, Covered Area Break-up with Estimated Costs of Construction.
- **☞PROJECT ECONOMICS**: Land & buildings, Plant, Machinery & Other Fixed Assets, Total Capital Investment, Working Capital Assessment, Raw Material & Consumable Stores, Staff Salaries & Wages, Utilities & Overheads, Total Cost of Project, Sources of Finance/Refinance, Break Even Point Determination.

For assessing Market Potential, Corporate Diversifications, Planning, Investment Decision Making and to start your own setup, Entrepreneurs and Industrialists are most welcome to contact EIRI.

## EIRI Technocrats and Engineers have just prepared "MARKET SURVEY CUM DETAILED TECHNO ECONOMIC FEASIBILITY REPORTS"

on following lucrative products which are most viable and profitable and having bright future scope

- \* COPPER SULPHATE FROM COPPER ASH/SCRAP CHELATED ZINC (ZN-EDTA) 12%
- \* ORTHOPAEDIC IMPLANTS AND INSTRUMENTS BARLEY MALT
- \* MINERAL TURPENTINE OIL (M.T.O.) FROM PETROLEM (SUPERIOR KEROSENE OIL OR OTHER MATERIAL)
- \* M.S.FASTENERS AND S.S. FASTENERS
- \* P.V.C. COMPOUNDING (FRESH) FOR CABLES AND PVC PIPES
- \* BANANA FIBRE EXTRACTION AND HAND MADE PAPER BANANA & ITS BY PRODUCTS
- \* COLOUR AND ADDITIVES MASTERBATCHES
- \* METALLIC STEARATE
  \* SURGICAL METHYLATED
- \* KHADSARI SUGAR (500 TCD)
  \* COTTON (RUI) FROM WASTE

- COTTON CLOTH
- LAUNDRY & DRY CLEANERS
- \* COATED YARN
- \* TOUGHENED GLASS
  \* CAUSTIC SODA (SODIUM HYDROXIDE) (NaoH)
- ELECTROLYTIC PROCESS

  \* PLASTIC WASTE RECYCLING
  UNIT & PYROLYSIS PLANT
  FROM PLASTIC AND RUBBER
- WASTE (INTEGRATED UNIT)

  \* CHITIN & CHITOSAN FROM
  PRAWN SHELL WASTE
- \* PASTA PRODUCTION PLANT (SHORT PASTA)
- \* SODIUM HYDRO SULFITE THROUGH FORMALDEHYDE ROUTE CAP-20 TPD
- \* SODA ASH PLANT FROM SOLVAY PROCESS
- \* ONION, AND GARLIC POWDER WITH GRAPE DEHYDRATION (RAISINS)
- \* FLUSH DOORS
- \* DI-METHYL PHTHALATES (DMP) \* GLUTEN FREE BEER

## Avail One Free Copy of HI-TECH PROJECTS Industrial Monthly Magazine by Email, Contact at: eiriprojects@gmail.com

eiribooks@yahoo.com

- PVC AND PP FILES AND FOLDERS
- \* SULFAMIC ACID PURE CRYSTAL AND OTHER GRADE (GP,SR & TM GRADE)
- DECORATIVE LAMINATED SHEET (SUNMICA)
- \* ALPHA CELLULOSE POWDER FROM COTTON WASTE
- \* CAST POLY PROPYLENE FILMS ( CPP FILM)
- CASHEW NUT PROCESSING BIOGAS PRODUCTION (1500 CUBIC METER PER DAY)
- \* SOYA MILK AND PANEER \* MINERAL TURPENTINE OIL (MTO)



EIRI is an expert
Industrial Consultant
working over 35 years
and specialized to
prepare all types of
Detailed Project
Reports based on
clients requirements.
Do Contact Today at:
eiritechnology@gmail.com

## Highly Profitable Projects for New Entrepreneurs "EIRI Market Survey Cum Detailed Techno Economic Feasibility Reports"

- \* STEEL FABRICATION \* STEEL ROLLING MILL (REINFORCEMENT BAR)
- \* ACRYLIC BATH TUB BY ACRYLIC SHEET
- \* FABRICATION OF HEAT EXCHANGER
- \* KITCHEN PRODUCTS MADE OF STAINLESS STEEL
- \* ALUMINIUM BEVERAGE CAN \* STEEL ROLLING MILL (BY INDUCTION FURNACE FROM STEEL SCRAP & SPONG IRON
- \* M.S. BILLET CASTING WITH INDUCTION FURNACE FROM STEEL SCRAP & SPONGE IRON
- \* PROCESSING OF LOW GRADE TUNGESTEN ORE FULL BODY & CHASSISS BUS PLANT
- \* ASSEMBLY OF AIR CONDITIONER/CHEST FREEZER/REFRIGERATOR
- \* G.I.LADDER & PERFORATED TRAYS
- \* ALUMINIUM DOORS & WINDOWS (ALUMINIUM FABRICATION)
- \* LEAF SPRINGS FOR TRACTOR DRAWN TROLLEYS & FOUR WHEELER TEMPOS
- \* STEEL BRIGHT BARS
- \* AUTOMOTIVE ENGINE VALVE \* AUTOMOTIVE BRAKING SYSTEM
- \* DISPLAY COOLER
- \* ERW STEEL PIPES & TUBES \* STEEL INGOTS
- \* TMT STEEL BARS (SARIYA)
- \* AUTOMOBILE TRACTORS
- \* ACTIVATED ALUMINA BALLS
- \* ALUMINIUM FOIL
- \* STONEWARE PIPE (S.W.PIPE)/ CLAY PIPE
- \* IRON ORE PELLETIZATION
- \* ELECTRIC CONTROL PANEL \* SOLAR PV POWER PLANT
- \* MACHINE SHOP (FOR OIL
- AND GAS ENGINÈERING INDUSTRY, AEROSCAPE ENGINEERING INDUSTRY)
- \* STEEL BRIGHT BARS
- \* CEILING FAN
- \* COPPER STRIP COILS FROM SCRAPS
- \* PRODUCTION OF PV PANELS (SOLAR PV PANELS) \* ROTARY AIR LOCKS, SCREW CONVEYOR, MOTORIZED/ PNEUMATIC DAMPER, FLAP VALVES, AIR SLIDES REQUIRED IN CEMENT PLANTS AND THERMAL POWER PLANT \* ALUMINIUM EXTRUSION

- ALUMINIUM COIL COATING FOR ACP AND ROOFING IND.
- \* PAVING BLOCK
- \* WIRE NAILS
- TMT STEEL BARS
  FASTENERS/NUT & BOLTS
  (INDUSTRIAL &AUTOMOBILE)
- \* HYDRAULIC CYLINDERS
  \* DISPOSABLE SYRINGES
  WITH NEEDLE PLANT
- \* FABRICATION UNIT (PRESSURE VESSEL, REACTOR VESSEL & AGITATORS, HEAT
- EXCHANGERS) & SEAMLESS PIPES AND TUBES \* COPPER POWDER FROM
- COPPER SCRAP
  \* STONE CRUSHER
- \* PRODUCTION OF ALL TYPES OF FANS SUCH AS AXIAL FANS, CENTRIFUGAL FANS (SMOKE EXTRACT FANS & FRESH AIR SUPPLY
- FANS), BATHROOM FANSETC.

  \* STONE MINING

  \* MAHINDRA CAR
  DEAL ERSHIP WITH
- DEALERSHIP WITH AUTOMOBILE SERVICE STATION/GARAGE
- \* AUTO FILTERS (AIR FILTERS, OIL FILTERS & FUEL FILTERS) \* AAC & ACSR ALUMINIUM CONDUCTORS
- \* MANGANESE ORE JIGGING \* STEEL TRANSMISSION LINE TOWERS AND ROLLING MILL TO PRODUCE STEEL SECTIONS
- FERRO SILICON (FROM MINERAL INGREDIENTS) STAINLESS STEEL TUBES
- \* M.S.FASTENERS AND S.S. FASTENERS \* PREFABRICATED STEEL
- \* PREFABRICATED STEEL FRAMED BUILDING MANUFACTURING PLANT
- \* LEAD ACID BATTERY \* GALVANISED WIRE
- \* POWER TRANSFORMER (50 KVA TO 2000 KVA) \* M.S. PIPE
- \* GALVANISED IRON SHEETS \* M.S.BILLETS
- \* STEEL GRATING (GALVANISING ELECTRO FORGED STEEL GRATING)
- \* ALLOY WHEELS PLANT \* ESTABLISHMENT OF MANUFACTURING OF
- REFRIGERATING APPLIANCE
  \* WELDED WIRE MESH
  \* ALUMINIUM COLD
- ROLLING MILL FOR SHEETS & CIRCLES
- \* ALUMINIUM ROLLING MILL FOR MANUFACTURING ALUMINIUM CIRCLES

- REQUIRED FOR PRESSURE COOKERS, NON STICK COOKWARES & CIRCLES
- \* LPG CYLINDER \* ALUMINIUM COMPOSITE
- PANNELS
  DEEP FREEZER
  ENVIRONMENTAL
  CLEARANCE FOR
  EXPANSION OF INGOTS/
  BILLETS PLANT
  FERRO SILICON BY
- SMELTING PROCESS
  ALUMINIUM CONDUCTOR
  PRESTRESSED
  CONCRETE POLES
- \* FASTENERS (NUT & BOLT) USED IN OIL AND GAS
- \* ALUMINIUM ALLOY PLANT \* STAINLESS STEEL SINKS \* ALUMINIUM ALLOY PLANT
- P.V.C BATTERYSEPARATOR AUTOMOTIVE TYRE AND TUBE VALVES (VALVES
- MANUFACTURING)
  \* PRESSURE COOKWARE
  ALUMINIUM, STAINLESS
- STEEL & HARD ANODIZED
  \* ELECTRIC WATER HEATER
- SOLAR WATER HEATER
  DOMESTIC & INDUSTRIAL
  CORRUGATED
  COLOURED ROOFING
- COLOURED ROOFING
  GALVANISED IRON SHEET
  \* PRESSURE DIE CASTING
- \* G.I.WIRE AND BARBED WIRE \* G.I.WIRE & M.S. BINDING
- WIRE
  \* HOT DIP GALVANIZING
- PLANT FOR STRUCTURAL
  STEEL AND PIPES
- \* COLD ROLLING MILL
  \* DOOR HINGES (MILD
  STEEL AND STAINLESS
  STEEL)
- \* PRESSURIZED AEROSOLS (LIKE BODY SPRAYS, PERFUMES, SHAVING FOAM AND SHAVING
- LOTIONS ETC.)

  \* ANHYDROUS SODIUM

  DITHIONITE PRODUCTION

  (SODIUM FORMATE
- PROCESS)
  SODA ASH PLANT (FROM SOLUTION BRINE)
- \* SISAL FIBRE
- REINFORCED
  CEMENT ROOFING SHEET
- \* HIGH ALUMINA REFRACTORY BRICK PLANT

**DISPOSABLE GOODS** 

\* CATHETERS
MANUFACTURING
\* SURGICAL BUBBER

- \* POULTRY AND HATHERY FARMING
- \* MILK PROCESSING PLANT \* ROASTED, SALTED ALMONDS, PEANUTS FOR PACKING IN 25g, 50g,250g & 500g SACHET-S
- \* BEER FROM POTATOES
- \* GUAR GUM POWDER \* AUTOMATIC WHITE BREAD
- MAKING PLANT
  \* AUTOMATIC BISCUIT MAKING
- PLANT
  \* FROZEN FOOD BY IOF
- TECHNOLOGY

  \* WALNUT PROCESSING PLANT

  \* WHIPPING CREAM FRUITS &

  VEGETABLES POWDER UNIT
- (EXPORTS ORIENTED UNIT)

  NATURAL MEDICINE &
  RESEARCH INSTITUTE
- WITH 150 BEDS HOSPITAL PACKAGED DRINKING WATER (PACKED IN 330 ml CUP, 500ML BOTTLE, 1500 ML BOTTLE AND
- 20 LTR. JAR)

  \* COLD STORAGE
  (CONTROLLED ATMOSPHERE
  OR CA) FOR POTATO CAP:
  1,00,000 BAGS (50 Kg/Bag),
  STORING CAP: 5000 Mt,
  SOLVENT EXTRACTION
- & REFINING (SOYABEAN) (Cap-250mt/day & 50mt/Day oil Refining) \* BOTTLING PLANT (WHISKY,
- BRANDY, RUM, VODKS, GIN) FROM RECTIFIED SPIRIT/ENA LUBE OIL BLENDING AND GREASES PLANT
- \* COLD STORAGE FOR POTATO 1,00,000 BAGS (50 KG/BAG) \* MAIZE FLOUR & BY PRODUCT
- MANUFACTURING PLANT \* CUT FLOWER (GLADIOLI, MARIGOLD, STATICE, CHRYSANTHEMUM ROSE
- WITH GREEN HOUSE)
  \* CATTLE FARMING AND
  DAIRY PRODUCTS
- \* COLD STORAGE FOR POTATO AND OTHER HORTICULTURE PRODUCTS Cap:- 5000 Mt
- or 100000 Bags (50 Kg/Bag)

  \* DEXTROSE PLANT

  \* SBR RUBBER SHEETS AND
  SHOE MANUFACTURING
- \* CASHEW NUT PROCESSING

  \* PLYWOOD AND PLYBOARD
  PARTICLE ROARD AND
- LAMINATED PARTICLE BOARD

  \* VENEER MAKING, PLYWOOD

  & PLYBOARD MAKING
- WALNUT & PINUS(CHILGOZA)
  OIL, SHELL POWDER
  PROCESSING PLANT
- \* COUNTRY LIQUOR BOTTLING PLANT (1,00,000 BOTTLES/

| * PLASTIC GRANULES FROM                        | * READY MADE GARMENT                              | FIBRE BLANKET, CERAMIC                               | * POLYALUMINIUM CHLORIDE                     |
|--|---|--|--|
| PLASTIC WASTE                                  | (T-SHIRT/POLO GOLFER/                             | FIBRE BOARD AND CERAMIC                              | * NAMKEEN INDUSTRY                           |
| * ROPE AND SUTLI MAKING                        | WOVEN SHIRTING & SUITING                          | FIBRE ROPE   | (BHUJIA, CHANACHUR ETC.)                     |
| PLANT  | FOR UNIFORMS/SWEATERS)                            | * COLD SUPPLY CHAIN                                  | * POLYOL USED FOR                            |
| * BOTTLING PLANT (COUNTRY                      | MANUFACTURING                                     | * LAMI TUBE MANUFACTURING                            | POLYURETHANES                                |
| LIQUOR) 10,000 LTRS./DAY)                      | * BIO-DIESEL EXTRACTION                           | * EYE DROP 3 PIECES                                  | * POLYSTYRENE POLY                           |
| * I.V. FLUID (FFS OR BFS                       | FROM JATROPHA,                                    | (PLASTIC VIALS)                                      | PROPYLENE OXIDE                              |
| TECHNOLOGY)                                    | SOYABEAN, SUNFLOWER,                              | * PET BOTTLES (CAMBER/                               | * DIETHYL PHTHALATE                          |
| * TOXIN PAN MASALA,                            | RICE BRAN, ALGE &                                 | CLEAR IN COLOUR) CAP:                                | * UREA FORMALDEHYDE AND                      |
| TOBACCO LESS GUTKHA                            | * CULTIVATION OF JATROPHA  * FAST FOOD RESTAURANT | 15ML,60ML 100ML,135ML,<br>200ML & 500ML              | MELAMINE * FORMALDEHYDE MOULDING             |
| AND ZARDA * RUBBER & FLAT                      | CHAIN WITH CENTRALLISED                           | * BENZYL ALKONIUM                                    | POWDER                                       |
| TRANSMISSION BELT                              | KITCHEN   | CHLORIDE (BKC)                                       | * INSTANT COFFEE                             |
| CONVEYOR BELT                                  | * GUAR SPLIT POWDER AND                           | * NATURAL SUGAR WAX                                  | * ANNATTO SEED COLOUR                        |
| * UPVC DOORS & WINDOWS                         | OTHER BY PRODUCTS                                 | * MARGARINE BUTTERFROM                               | EXTRACTION                                   |
| FABRICATING PLANT (Fixing                      | * SOLVENT EXTRACTION                              | VEGETABLE OIL  | * FRUITS AND VEGETABLES                      |
| and Installation of Door and                   | PLANT (COTTON SEED)                               | * GREEN HOUSE FOR CROP                               | DRYING BY (FREEZE DRYING                     |
| Windows of uPVC profiles)                      | * RASGULLA MANUFACTURING                          | PRODUCTION   | METHOD)                                      |
| * RUBBER & FLAT                                | AND CANNING                                       | * ORGANIC DAIRY FARMING                              | * BIO GAS PRODUCTION AND                     |
| TRANSMISSION BELT                              | * CULTIVATION OF RICE &                           | * E-WASTE  | BOTTLING PLANT                               |
| CONVEYOR BELT                                  | WHEAT COMMERCIAL &                                | * BIO-DIESEL FROM ALGAE                              | * JAM, JELLIES, FRUIT JUICE                  |
| * MUSTARD OIL PROCESSING                       | MECHANISED DEVELOPMNT                             | * VANADIUM PENT OXIDE                                | AND ALLIED PRODUCTS                          |
| PLANT (EXPELLER PROCESS)                       | * MAIZE & BY PRODUCTS<br>PROCESSING -STARCH       | GRAPHITE MINING AND BENEFICIATION PLANT              | MATERNITY NURSING HOME                       |
| * MEDICAL COLLEGE WITH                         |   | * VITAMIN WATER                                      | * CANNING & PRESERVATION                     |
| 750 BEDS HOSPITAL FACILITY  * MICRO IRRIGATION | MODIFIED STARCHES/LIQUID GLUCOSE/DEXTROSE         | * PET PREFORM CUM PET                                | OF VEGETABLES * CURCUMIN & TURMERIC OIL      |
| PRODUCT MANUFACTURING                          | MONOHYDRATE/GLUCOSE                               | BOTTLES  | FROM TURMERIC                                |
| PLANT  | SYRUPS/CORN SYRUP                                 | * ORGANIC DAIRY FARMING                              | DETERGENT WASHING                            |
| * HOT DIP GALVANIZING                          | SOLIDS/HIGH MALTOSE                               | AND PRODUCING WHOLE                                  | POWDER (ARIEL TYPE)                          |
| MUSTARD OIL PROCESSING                         | CORN SYRPS/ MAITO                                 | MILK POWDER (WMP)                                    | * GRANITE SLAB AND TILES                     |
| PLANT (EXPELLER PROCESS)                       | DEXTRINE POWDER/CORN                              | * HDPE BOTTLES                                       | * TEA PACKAGING                              |
| CEMENT TILES, CANAL LINE                       | GLUTEN MEAL (60%) MAIZE                           | * CAUSTIC SODA FROM                                  | * PAN MASALA & GUTKHA                        |
| SLAB, KERV STONE, PAYER                        | OIL/SORBITOL                                      | SODIUM CHLORIDE                                      | * PRESTRESSED CONCRETE                       |
| RCC PIPE, MANOHOLE                             | * TEAK FARMING                                    | * COAL TAR PITCH                                     | ELECTRIC POLES                               |
| COVER,ENTERLOCKING ETC.                        | * ARTIFICIAL MARBLE                               | * MOSQUITO REPELLANT                                 | * LEATHER SHOES                              |
| MANUFACTURING PLANT                            | (SYNTHETIC)                                       | * WRIST BAND   | * ROTOGRAVURE PRINTING                       |
| * MEDICAL COLLEGE (100                         | * POTATO STARCH CARDANOL                          | * CASTOR OIL AND ITS                                 | (FOR FLEXIBLE PACKAGING)                     |
| STUDENT INTAKE                                 | FROM C.N.S.L. (CASHEWNUT SHELL LIQVID             | DERIVATIVES OLEO RESIN,<br>TURKEY RED OIL, DCO, HCO, | * AUTOCLAVED AERATED                         |
| CAP. MEDICAL COLLEGE                           | * INTEGRATED SCRAP YARD                           | SEBACIC ACID, 12-HYDROXY                             | CONCRETE BLOCKS * OXYGEN AND NITROGEN        |
| WITH 500 BED HOSPITAL) * ESTABLISHMENT OF A    | * POTATO STARCH                                   | STEARIC ACID   | GAS PLANT                                    |
| PRIVATE UNIVERSITY                             | * MANGO PULP (5 TON/HOUR                          | * PAPAIN FROM PAPAYA                                 | * MANGANESE ORE                              |
| * DIGITAL INKS                                 | 200 KG ASEPTIC PACKAGING)                         |  | BENEFICATION                                 |
| * GALVANIZING PROCESS                          | * BOTTLING PLANT (WHISKY,                         | * MONOCHLOROBENZENE                                  | * MINERAL WOOL                               |
| PLANT FOR ELECTRICAL                           | BRANDY, RUM, VODKA, GIN)                          | * EUGENOL FROM CINNAMON                              | * CALCIUM SILICATE                           |
| POLES  | FROM RECTIFIED SPIRIT/ENA                         | OIL  | * TOUGHENED GLASS                            |
| * MAIZE PROCESSING PLANT                       | * COW DAIRY FARMING                               | * SULPHUR 80% WDG                                    | * HUMIC ACID                                 |
| * STARCHES / MODIFIED                          | (AYRSHIRE/HOLSTEIN) AND                           | * CERAMIC FIBERS,                                    | * OFFSET PRINTING UNIT                       |
| STARCHES/ LIQUID GLUCOSE                       |   | CERAMIC FIBRE BLANKET,                               | (5 COLOUR)                                   |
| / DEXTROSE MONOHYDRATE                         | CAP-50,000 LTR/DAY                                | CERAMIC FIBRE BOARD                                  | * CASTOR OIL AND ITS                         |
| /GLUCOSE SYRUPS / CORN                         | * WHEAT FLOUR MILL<br>* CHAKKI FLOUR MILL         | * SCREEN PRINTING                                    | DERIVATIVES OLEORESIN * TISSUE PAPER PULPING |
| SYRUP SOLIDS / HIGH                            | * I.V. FLUID (FFSTECHNOLOGY)                      |  | FROM SAW DUST                                |
| MALTOSE CORN SYRUPS / MALTO DEXTRINE POWDER /  | * LIQUID GLUCOSE FROM                             | FROM ROCK PHOSPHATE                                  | * KNITTED GLOVES                             |
| CORN GLUTEN MEAL (60%)                         | POTATOES  | & HAIFA PROCESS                                      | * RADIATOR COOLANT                           |
| MAIZE OIL / SORBITOL.                          | * SORBITOL FROM MAIZE                             | * PVC FLEXIBLE PIPE                                  | * LATEX FOAM RUBBER                          |
| * BABY CARE PRODUCTS                           | STARCH  | * FLEX BANNER USED IN                                | (SPONG RUBBER)                               |
| * FAT LIQUOR (CHLORINATED                      | * WALNUT PROCESSINGPLANT                          | DIGITAL PRINTING                                     | * GARLIC OIL AND POWDER                      |
| PARAFFIN WAX)                                  | * SOLVENT EXTRACTION AND                          | * PIGMENTS BINDERS FOR                               | * ACTIVATED CARBON &                         |
| * BOTTLING OF WHISKY                           | OIL REFINERY CUM PACKING                          | TEXTILE PRINTING                                     | SODIUM SILICATE FROM                         |
| * UPVC DOORS & WINDOWS                         | OF RICE BRAN OIL                                  | * POULTRY & HATCHERY FARM                            | PADDY/ RICE HUSK                             |
| PROFILES                                       | * COTTON SEED OIL SOLVENT                         | * ALOEVERA JUICE AND GEL                             | * TRIETHYLENE GLYCOL                         |
| * EPDM RUBBER PROFILES                         | EXTRACTION PLANT                                  | * LIME PUTTY   | * RAMMING MASS                               |
| * FAT LIQUOR (CHLORINATED                      | * MARINE TRAINING INSTITUTE                       |  | * WOOD PEELING &                             |
| PARAFFIN WAX)                                  | & PLACEMENT SERVICE<br>PROVIDING AGENCY           | GARAGE * EGG TRAY FROM PULP                          | VENEER MAKING * PETROLEUM JELLY              |
| * FAST FOOD RESTAURANT<br>WITH CENTRALLISED    | * I.V.FLUID (FFS TECHNOLOGY)                      |  | * DAIRY FARM (COW &                          |
| KITCHEN  | * CERAMIC FIBERS, CERAMIC                         | * OXYGEN GAS   | BUFFALO) TO PRODUCE                          |
| OTTER  |   |  |  |

Market Survey Cum Detailed Techno Economic Faeasibility Report on all Projects are available contact: ENGINEERS INDIA RESEARCH INSTITUTE

4449, Nai Sarak, Main Road, Delhi - 110 006 (India) \* Ph. : +91 9811437895, 9811151047, 91-11-23918117, 23916431, 23947058, 45120361 Email: eiribooks@yahoo.com, eiriprojects@gmail.com Website: www.eiriindia.org, www.eiribooksandprojectreports.com

# Highly Profitable Projects for New Entrepreneurs "EIRI Market Survey Cum Detailed Techno Economic Feasibility Reports"

|                                   | conomic Feas                                     | sibility Reports                                   | **   |
|-----------------------------------|--|--|--|
| MILK & PACKAGING IN               | * MEDICAL DISPOSABLE                             | YARN, DYEING & WEAVING                             | * DUSTLESS CHALK                           |
| POUCHES                           | PLASTIC SYRINGES                                 | * CALCIUM CHLORIDE                                 | (SCHOOL CHALK)                             |
| * CUTTING OIL LIQUID GOLD         | * METAL POLISHING BAR                            | * AMINES & ALLIED PRODUCT                          | * TOMATO POWDER                            |
| (IN PASTE FORM)                   | * SANITARY NAPKINS & BABY                        | * SPINNING COTTON                                  | * BIODEGRADABLE /                          |
| * P.V.C. LEATHER CLOTH            | DIAPERS  | * SILICONE FROM RICE HUSK                          | COMPOSTABLE PLASTICS                       |
| (REXINE)                          | * PERFUMES/ATTAR                                 | * ADHESIVE (FEVICOL TYPE)                          | * ACRYLIC CO POLYMER                       |
| * COAL TAR DISTILLATION           | * GEMS AND JEWELLERY                             | * CAUSTIC SODA FROM                                | EMULSION                                   |
| * ALUMINIUM LABEL PRINTING        | * MULTIAXIAL GLASS FABRIC                        | ELECTROLYSIS                                       | * ESTER GUM (FOOD GRADE)                   |
| * FOLDING CARTNS/MONO             | * ACTIVE ZINC OXIDE                              | * CAMPHOR TABLETS                                  | * PROTEIN BASED FOAMING                    |
| CARTONS                           | * COPPER PHTHALOCYANINE                          | * CERAMIC GLAZED WALL                              | AGENT                                      |
| * SURGICAL DISPOSABLE             | * TURMERIC OIL EXTRACTION                        | AND FLOOR TILES                                    | * LECITHIN (SOYA BASED)                    |
| GLOVES (DIPPED RUBBER             | FROM DRY TURMERIC                                | * ZINC SULPHATE MONO                               | * SOYA OIL AND CATTLE                      |
| GOODS)                            | * CNSL BASED RESIN IN                            | * ETHANOL (BIO FUEL)                               | FEED FROM SOYA<br>BEAN                     |
| * AGRICULTURAL CHEMICAL           | LIQUID & POWDER FORM                             | FROM RICE STRAW                                    | * COMPARISON BETWEEN                       |
| (PLANT GROWTH PROMOTER            |  | * GYPSUM MOULDING AND<br>GYPSUM BOARD              | FLY ASH AND CELLULAR                       |
| AND PLANT GROWTH                  | * BETA IONONE                                    | * SMOKELESS COAL                                   | LIGHTWEIGHT CONCRETE                       |
| REGULATOR)                        | * BIO-FERTILIZER                                 | * ACID (SILICA) AND BASIC                          | (CLC) BRICKS                               |
| * MENTHOL BOLD CRYSTALS           | * ZINC & COPPER SULPHATE                         | RAMMING MASS                                       | * CELL CAST ACRYLIC                        |
| FROM MENTHOL FLAKES               | * PAPER BASED PHENOLIC                           | * UNSATURATED                                      | SHEET                                      |
| * ORGANIC FARMING<br>* CORRUGATED | SHEET (FOR ELECTRICAL                            | POLYESTER RESINS                                   | * ACRYLIC BATH TUB AND                     |
| POLYCARBONATE SHEET               | APPLIANCE)                                       | * DAIRY (BUFFALO) FARMING                          | SHOWER TRAY                                |
| * COLD STORAGE                    | * THINNERS (WHITE SPIRIT<br>BASED)               | SILICONE FROM RICE HUSK                            | * THERMOCOLE BASED                         |
| * FLAT PVC LAMINATED              | * SINGLE SUPER PHOSPHATE                         | * N-ACETYL THIOZOLIDINE-                           | DISPOSABLE PLATES                          |
| * SAFTY GLASS/TOUGHENED           | & SULPHURIC ACID                                 | 4-CARBOXYLIC ACID (NATCA)                          | * SODIUM SILICATE FROM                     |
| GLASS                             | * MONO CALCIUM PHOSPHATE                         | * PE BASED CARBON BLACK                            | RICE HUSK                                  |
| * PLASTIC GRANULES FROM           | & DI-CALCIUM PHOSPHATE                           | COMPOUND   | * ETHYL METHACRYLATE                       |
| WASTE                             | * FLEXIBLE P.U. FOAM                             | * ONION DEHYDRATION                                | * SODIUM LAURYL ETHER                      |
| * DRY WALL PUTTY (WHITE           | * ASPIRIN  | * PVC PIPES & FITTING                              | SULPHATE                                   |
| CEMENT BASED)                     | * SORBITOL FROM MAIZE                            | * GLASS REINFORCED                                 | * LATEX GLOVES,                            |
| * CHARCOAL BRIQUETTE              | STARCH   | * GYPSUM MOULDINGS                                 | CONDOMS & CATHETER                         |
| * OXALIC ACID FROM                | * SPICE OIL & OLEORESIN                          | ABSORBENT COTTON &                                 | * CALCIUM NITRATE                          |
| MOLASSES                          | * ANTI-FOAMING AGENT                             | SURGICAL BANDAGES                                  | GRAIN BASED ALCOHOL                        |
| * POTATO GRANULES                 | (SILICONE BASED) FOR                             | * CALCIUM STEARATE BY                              | DISTILLERY                                 |
| * SANITARY NAPKINS & BABY         | DISTILLERY, SUGAR, PAPER                         | FUSION PROCESS                                     | * BULK DRUGS                               |
| DIAPERS                           | PLANT ETC.                                       | * MANGO POWDER & OTHER                             | * MARBLE QUARRYING                         |
| * CORRUGATED BOXES                | * LAUNDRY & DRY CLEANER                          | FREEZE DRIED PRODUCTS                              | * CULTIVATION OF                           |
| * PLASTER OF PARIS                | * BRICKS FROM STONE DUST                         | * MENTHOL OIL FROM                                 | CAPSICUM IN GREEN                          |
| * RUBBER ROLLER FOR               | * CARBOXY METHYL STARCH                          | LEAVES AND MENTHOL                                 | HOUSE * SULPHUR 90% WDG                    |
| PRINTING MACHINE                  | * TITANIUM DIOXIDE                               | * CRYSTALS (PEPPERMINT)<br>MANUFACTURE OF          | * EGG POWDER                               |
| * LACTIC ACID                     | * UNDECYENIC ACID                                |  |  |
| * EMERY PAPER (SAND PAPER)        |  | CELLULOSE ACETATE * ANTIFOAMING /                  | * WOOD PLASTIC * COMPOSITE BOARD LINE      |
| * RUBBER RECLAIM SHEET            | GENERATOR  | DEFOAMING AGENT                                    | * SODIUM LAURYL SULPHATE                   |
| FROM USED BUTYL TYRE AND TUBE     | * SYNTHETIC IRON OXIDE                           | * ALOEVERA CULTIVATION &                           | AND SODIUM LAURYL                          |
| * MANGO PULP                      | * PVC INSULATION TAPE                            | PROCESSING   | ETHER SULPHATE                             |
| * PARTICLE BOARD FROM             | * TAMARIND KERNEL POWDER<br>* ORGANIC CHEMICAL & | * SYNTHETIC MAGNESIUM                              | * FISH PROCESSING                          |
| BAGASSE AND RICE HUSK             | SOLVENTS   | SILICATES  | * BABY CEREAL FOOD & MILK                  |
| * TOILET PAPER & NAPKINS          | * PLASTICIZERS                                   | * EPHEDRINE  | POWDERS (BABY FOOD)                        |
| * TENDER COCONUT WATER            | * ICE PACK (SOLUTIONS                            | HYDROCHLORIDE                                      | * GUR (JAGGERY)                            |
| * CALCIUM CARBONATE               | TYPE, VIOLET-SEMI SOLID                          | * ACTIVATED BLEACHNG                               | * DAIRY PRODUCTS                           |
| * LIME CALCINATION PLANT          | POLYMER TYPE)                                    | EARTH  | * CHLORINATED PARAFFIN                     |
| * INJECTION MOULDED               | * GUM FROM TAMARIND                              | * TECHNICAL TEXTILES                               | WAX (CPW)                                  |
| PLASTIC COMPONENTS                | * PEARL SUGAR CANDY                              | * FORMALIN FROM                                    | * HAND WASHING                             |
| * HYDRATED LIME                   | (MISHRI)   | METHANOL   | DETERGENT POWDER                           |
| * BLACK PEPPER                    | * GOAT & SHEEP FARMING                           | * CATIONIC SOFTNER                                 | USING THE DRY MIX                          |
| * MULTIAXIAL GLASS FABRIC         | * GYPSUM PLASTIC BOARD                           | (STEARIC ACID BASED)                               | PROCESS INCLUDING                          |
| * LIQUID TOILET CLEANER           | (AUTOMATIC PLANT)                                | * PRECIPITATED SILICA                              | FORMULA OF DIFFERENT                       |
| (HARPIC TYPE)                     | * NON-WOVEN INDUSTRY                             | * PU BASED FOOT WEARS                              | TYPES QUALITIES (LOW/                      |
| * LIME & PRECIPITATED             | (CARRY BAGS, SURGICAL                            | * FORMALDEHYDE RESIN                               | MEDIUM/HIGH COST)                          |
| * CALCIUM CARBONATE               | GOWN, FACE MASK, ROUND                           | (UREA, PHENOL, MELAMINE)                           | * HANDWASHING DETERGENT                    |
| * LIQUID GLUCOSE FROM             | CAPS, SHOE COVER, GLOVE)                         | * HDPE MONO FILAMEN NET<br>* POTATO & ONION FLAKES | POWDER USING THE DRY MIX PROCESS INCLUDING |
| BROKEN RICE                       | * COTTON SPINNING, SIZING,                       | FOIAIO & UNION FLAKES                              | WITA I NOCESS INCLUDING                    |

Market Survey Cum Detailed Techno Economic Faeasibility Report on all Projects are available contact: **ENGINEERS INDIA RESEARCH INSTITUTE** 

4449, Nai Sarak, Main Road, Delhi - 110 006 (India) \* Ph. : +91 9811437895, 9811151047, 91-11-23918117, 23916431, 23947058, 45120361 Email: eiribooks@yahoo.com, eiriprojects@gmail.com Website: www.eiriindia.org, www.eiribooksandprojectreports.com

FORMULA OF DIFFERENT TYPES QUALITIES (LOW/ MEDIUM/HIGH COST)

- DIGITAL PHOTOPAPÉR/ **INKJET PHOTOPAPER**
- KAOLIN FOR ROAD MAKING PEPPERMINT CULTIVATION & **PROCESSING**
- PEPPERMINT CULTIVATION & **PROCESSING**
- HDPE PIPE
- ACTIVATED CARBON FROM RICE HUSK
- HT & LT INSULATOR, HT AIR BRAKE SWITCH D.O. FUSE. LIGHTENING ARRESTOR
- PET BOTTLES IN CAP: 500ML 1 LTR. 2 LTRS. 5 LTRS. USED FOR PACKAGED DRINKING WATER, EDIBLE OILS
- ALCOHOLIC BEVERAGES (COUNTRY LIQUOR & IMFL)
- QUARTZ BASED INDUSTRIES (QUARTZ POWDER SILICA SAND SILICA RAMMING MASS FUSED SILICA)
- BEEDI (BIDI) BY MACHINE
- RICE SHELLER
- FRUIT RIPENING CHAMBER
- MINERAL WATER AND PET **BOTTLING PLANT**
- DIAGNOSTIC LAB AND
- ONLINE TRADING BUSINESS
- CEREAL MILLING
- MINI OIL PLANT SUITABLE FOR GROUNDNUT OIL AND COTTON SEED OIL
- CHANACHUR, BHUJIA GANTHIA (AUTOMATIC PLANT)
- KHADYA SURAKSHA (FOOD SECURITY)
- PLASTIC WATER STORAGE TANKS
- ZINC SULPHATE, MONOHYDRATE & HEPTA **HYDRATE**
- CIGARETTE
- MANUFACTURING UNIT
- CATTLE FEED PELLETS PLANT FOR COW & BUFFALOE FOR BOOSTING MILK AND GROWTH TYRE RECYCLING UNIT
- PAPAIN EXTRACTION INDUSTRY
- CAKE SHOP
- BUSINESS PROCESS

- OUTSOURCE (B.P.O.)
- EMPTY HARD GELATINE **CAPSULES**
- **BIOFERTILIZER**
- PLASTIC MOULDING UNIT (CHAIR, TABLES & VEGETABLE TRAYS)
- GOLD POTASSIUM CYANIDE (G.P.C.)
- HDPE, PVC & CPVC PIPES AND FITTINGS
- NO CARB PASTE (ANTICARBURIZING PASTE-WATER SOLUBLE) FOR HEAT TREATMENT
- CONVERSION WASTE PLASTIC WITH TYRE INTO ACTIVATED CARBON AND INDUSTRIAL FUEL
- PYROLYSIS PLANT FROM PLASTIC & RUBBER
- COMPARISON BETWEEN FLY ASH AND CELLULAR LIGHTWEIGHT CONCRETE (CLC) BRICKS
- AGAR AGAR
- NAIL POLISH
- PLASTIC GRANULES FROM WASTE
- AGARBATTI SYNTHETIC PERFUMERY COMPOUNDS & AGARBATTI COMPOUNDS LIKE (CHAMPA, MOGRA,
- SANDAL WOOD & LOBAN) PET PREFORM AND PET JARS (20 LTRS CAPACITY)
- KRAFT PAPER FROM 100% WASTE PAPER
- PRIVATE UNIVERSITY
- LIQUID GLUCOSE AND MALTODEXTRIN FROM **BROKEN RICE**
- DRY WALL PUTTY (WHITE CEMENT BASED)
- CONSTRUCTION CHEMICALS OT PASTE
- FUSED SILICA FROM SILICA SAND
- BANANA CHIPS, BANANA PULP & BANANA POWDER (BANANA PRODUCTS)
- CONFECTIONERY UNIT (TOFFEE, CANDY /LOLLIPOP CHEWING GUM, BUBBLE **GUM CHOCOLATE)**
- FORMALDEHYDE RESIN (UREA. PHENOL, MELAMINE & THEIR MODIFIED RESINS)

- **EPDM RUBBER PROFILES** (WEATHER STRIPS INDUSTRIAL MONOSTRIPS FTC)
- GRANITE CUTTING AND POLISHING UNIT (100% EOU) SURGICAL COTTON, ROLLER BANDAGE, CREPE BANDAGE & PLASTER CART (READY MADE) E.G. GYPSONA 3M
- ENTERTAINMENT CLUB, HOLIDAY RESORT, 4 STAR HOTEL, AMUSEMENT PARK CUM WATER PARK, MUSHROOM & ITS PRODUCTS, FISH FARMING, LAKE FOR BOATING, DEER PARK ETC.
- HDPE, PVC, LLDPE PIPES/ TUBES AND FITTING **EPOXIDIZED SOYABEAN OIL** (SECONDARY PLASTICIZER) USED IN PVC COMPOUND
- POULTRY PROCESSING PI ANT
- B.O.P.P. SELF ADHESIVE **TAPES**
- I.V.SET
- MANGANESE OXIDE AND MANGANESE SULPHATE ODOURLESS NYLON
- GRANULES FROM FIBER OF WASTE TYRE WITHOUT CHANGING PROPERTIES OF
- PARTICLE BOARD FROM RICE HUSK OR WOOD WASTE OR SUGAR CANE BAGASSE OR MIXED OF ALL ABOVE POULTRY LAYER AND **BROILER FARMING**
- TOMATO, GUAVA AND MANGO PULP
- **GREEN HOUSE** HYDROXY PROPYL GUAR (HPG) AND CARBOXY METHYL HYDROXY PROPYL **GUAR**
- BATHSOAP MANUFACTURE PLASTIC MOULDED CHAIRS FROZEN POTATO PATTY
- CALCIUM ALUMINATE ACTIVATED CARBON FROM **COCONUT SHELL**
- RIGID PVC FILM MANUFACTURE FOR PHARMACEUTICALS BLISTER

- PACKAGING NYLONE 66 CURING TAPE USED IN RUBBER HOSE PIPE WRAPPING
- ANTIFOAMING/DEFOAMING AGENT LIKE ANTAROL T-709 SOY AND GLUTEN BASED
- MOCK MEAT KRAFT PAPER USING WASTE PAPER AND OLD
- CORRUGATED CARTONS GLASS BOTTLE FOR BEER AND BEER MUG (TUMBLER) DISPOSABLE SYRINGES AND NEEDLE PLANT (Single Use Syringes, Single Use Needles &
- As Syringes) DIRECT FILLED BALL PEN (USE AND THROW)
- BENZALKONIUM CHLORIDE SPINNING COTTON (COTTON SPINNING PLANT)
- CALCIUM CHLORIDE USING LIME STONE AND HYDROCHLORIC ACID BURBER POWDER FROM WASTE TYRES
- CALCINATION PLANT FOR PYROPHYLLITE AND DIASPORE MINERALS BY VERTICAL SHAFT KILN **PROCESS**
- ONION, GARLIC & GINGER DEHYDRATION PLANT
- POTASSIUM NITRATE
- POTASSIUM SULPHATE N.P.K. FERTILIZER
- CHICORY EXTRACT (ROASTED CHICORY GRANULES/CUBES, LIQUID EXTRACT ETC.)
- SOLID WASTE SEGREGATION LAMITUBE MANUFACTURE
- **BOARDING SCHOOL** CERAMIC FUSE TUBE/ BARRELS USED IN HRC FUSE
- SODIUM POLYACRYLATE DISPERSANT FOR USE IN WATER BASED PAINT WITH DISPERSANT FOR PIGMENT
- NAIL POLISH, LIPSTICKS. NAIL POLISH REMOVER SOYA PRODUCTS (MILK, PANEER, TOFU, BUTTER, CHEESE CURD/YOGURT, ICE CREAM) WITH PACKAGING
- GREASE MANUFACTURING

## TERMS AND CONDITIONS



Ask for the quotation for the required project report at eiritechnology@gmail.com or eiriprojects@gmail.com Mob: +91 9811437895 or +91 9811151047

## ENGINEERS INDIA RESEARCH INSTITUTE

Regd. Off: 4449, Nai Sarak, Main Road. Delhi - 110 006 (India) Ph: +91 9811437895, 9811151047, 91-11-23918117, 23916431, 45120361, 23947058, 64727385

\* E-Mail: eiriprojects@gmail.com, eiribooks@yahoo.com \* Website: www.eiriindia.org, www.eiribooksandprojectreports.com

Deposit the amount in "EIRI "Account with HDFC BANK CA-05532020001279 (RTGS/NEFT/IFSC CODE: HDFC00001981) OR ICICI BANK CA - 038705000994 (RTGS/IFSC CODE: ICIC0000387) OR AXIS Bank Ltd. CA- 054010200006248 (RTGS/IFSC CODE:UTIB0000054) OR UNION BAK OF INDIA CA-307201010015149 (RTGS/NEFT/IFSC CODE: UBIN0530727) OR STATE BANK OF INDIA CA-30408535340 (RTGS/IFSC CODE: SBIN0001273) & SMS ON PH. 09811437895

## AVAILABLE PROCESS TECHNOLOGY BOOKS AT

## www.eiribooksandprojectreports.com and www.eiriindia.org

Name of Books CHEMICALS, DYES, LUBRICATING

## OILS, PETRO CHEMICALS ELECTROPLATING

- Small Medium & Large Chemical Industries
- Industrial Chemicals Technology Hand Book Modern Technology of
- Organic & Inorganic Chemicals
- Electroplating, Anodizing & Surface Finishing Technology
- Hand Book of Agro Chemical Indust.(Insecticide & Pesticide)
- Technology of Synthetic Dyes, Pigments Intermediates
- Petrochemicals, Lubricants, **Greases & Petroleum Refining** H.B.of Lubricants, Greases & Petrochemicals Technology

## **GUMS, ADHESIVES & SEALANTS**

- Technology of Gums, Adhesives & Sealants with Formulations
- **Hand Book of Adhesives**
- with their Formulae (2nd Edn.) Adhesives Technology &
- Formulations Hand Book
- Technology of Glue & Adhesives with Adhesives **Bonding and Formulations**
- Complete Hand Book on Adhesives and Adhesion Tech. with Project Profiles

## SMALL SCALE INDUSTRIES, STATIONERY, PAPER, INKS, CANDLES & EXPORT BUSINESS

- Start Your Own Export
- Business (How To Export)
- Start Your Own Small **Business and Industry**
- Candle Making Processes & Formulations Hand-Book
- Stationery, Paper Converting
- & Packaging Industries
- Modern Inks Formulaes & **Manufacturing Industries**
- Profitable Businesses to
- Start for Entrepreneurs
- Modern Small & Cottage Scale Industries
- **Profitable Small Cottage Tiny**
- & Home Industries (2nd Edn.)

## BIO FUEL, BIO GAS & BIOPROCESSING

- Technology of Bio-Fuel (Ethanol & Biodiesel)
- Mod. Tech. of Bioprocessing
- Mod. Tech. of BioGas Production

## WEETS, NAMKEEN & SNACK FOOD

- Tech of Sweets (Mithai) with Formulae
- Technology of Sweets (Mithai), Namkeen and Snacks Food with Formulae

### Name of Books

Mfr. of Snacks Food, Namkeen, Pappad & Potato Products

## PACKAGED DRINKING WATER

Technology of Water and Packaged Drinking Water

## **PRINTING & PACKAGING**

- Printing Processes Tech. & Indt. Hand Book of Printing Tech. (Offset, Screen, Flexo, Gravure, Inkjet & Digital)
- Hand Book of Offset Printing Technology
- Screen Printing with Processes & Technology
- Hand Book of Prepress
- Hand Book of Packaging Indus Modern Packaging Technology for Processing Food, Bakery, Snack Foods, Spices and **Allied Food Products**
- Hand Book of Food Packaging Technology
- Modern Tech. of Printing Inks Hand Book of Packaging Tech.

## PAINT, VARNISH, SOLVENTS **POWDER COATING & LACQUERS**

- Paint Pigment Varnish & Lacquer Manufacturing
- Paint Varnish Solvents & Coating Technology
- Paint, Pigment, Solvent, Coating, Emulsion, Paint
- **Additives & Formulations** Technology of Coatings, Resins,
- Pigments & Inks Industries Mfg. Tech. & Formulations H.B. on Thinners, Putty, Wall & Indu.
- Finishes & Synthetic Resins Technology of Synthetic
- **Resins & Emulsion Polymers** Technology of Paints and
- Coatings with Formulations **Powder Coating Technology** Hand Book

## PLASTIC/POLYMER PROCESSING, COMPOUNDING, INJECTION MOULDING, ROTATIONAL

MOULDING, PLASTIC FILM, FIBRE GLASS, PLASTIC WASTE RECYCLING, MOULDS, PET & RESINS, ADDITIVES INDUSTRIES

- Hand Book **Hand Book of Plastic Materials**
- & Processing Technology Injection Moulding of Plastics
- Plastic Processing & **Packaging Industries**
- Plastic Waste Recycling Tech. Technology of Plastic Films
- Rotational Moulding Technology Hand Book
- Plastic Compounding, Master **Batches, PET & Other Plastics** Synthetic Resins Technology

### Name of Books

- with Formulations Tech. of PVC Compounding & Its Applications
- H.B. of Polymer & Plastic
- Technology H.B. of Fibre Glass Moulding Techn. of Reinforced Plastics
- Plastic Additives Technology Hand Book
- Technology of PET Bottles, Preform and PET Recycling
- Modern Technology of **Extrusion & Extruded Products**
- **Technology of Synthetic**
- **Resins & Emulsion Polymers** Technology of Plastic Additives
- with Processes and Packaging Complete Technology Book On Identification Of Plastics And **Plastic Products Materials**
- (Additives, Applications, Biodegradation, Biomedical, **Bulk Moulding Compound,** Chemical Analysis, XIpe, **Drip Irrigation, Expanded** Polyethylene, Polystyrene
- & Hdpe) Identification Of Plastics And Other Plastic Process Industries (Polystyrene, Nylon, Thermoplastic Elastomer, Alkyd Resin,
- Polypropylene Plastics, Melamine Formaldehyde Resins, Abs, Plastic Blends, Polyvinylidene Chloride Plastics, Polymer, Pipes)
- Complete Technology Book Of Plastic Processing And **Recycling Of Plastics With Project Profiles**
- Modern Technology Of Injection Moulding, Blow Moulding, Plastic Extrusion, Pet And Other Plastics

## **BAKERY, CONFECTIONERY &** BREAKFAST, PASTA & CEREALS

- Hand Book of Bakery Industries Hand Book of Confectionery with Formulations
- Breakfast. Dietary Food, Pasta & Cereal Products Technology
- Hand Book of Modern Bakery Products (2nd Edn.)
- Modern Bakery Technology & Fermented Cereal Products with Formulae
- Technology of Confectionery, Chocolates, Toffee, Candy, Chewing & Bubble Gums, **Lollipop and Jelly Products** with Formulations

## AGRO CULTIVATION, ANIMAL **FARMING, AGRO PLANTATION &** AGRO CHEMICAL/PESTICIDES/ FLORICULTURE & BEE KEEPING

Poultry Farm & Feed Formulae Hand Book of Pig Farming

## LIST OF PUBLICATIONS/BOOKS PUBLISHED BY: ENGINEERS INDIA RESEARCH INSTITUTE 4449, NAI SARAK, MAIN ROAD, DELHI - 6 (INDIA)

|  | 4449, NAI SAKAK, MAIN   |   |
|--|---|---|
| Name of Books  | Name of Books   | Name of Books   |
| * Agro Based H.B. of Plantation,   | * Technology of Maize   | Manufacture of Cosmetics  |
| Cultivation & Farming  | & Allied Corn Products  | (Synthetic & Herbal)  |
| * Agro-Based Plantation  | * Technology of Food  | * Hand Book of Synthetic &  |
| Cultivation & Farming  | Processing Industries   | Herbal Cosmetics  |
| * Agro Chemical Industries   | * Complete Book on Banana   | * Technology of Herbal  |
| (Insecticide & Pesticides)   | Cultivation, Dehydration  | Cosmetics & Toiletries  |
| * Modern Bee Keeping & Honey   | Ripening, Processing,<br>Products & Packaging   | Products with Formulae  |
| Processing * Technology of Modern Rice   | Technology  | OILSEEDS AND FATS   |
| Milling and Basmati Rice   | * Agro Food Processing  | * Hand Book of Oils, Fats and   |
| * Hand Book of Goat Farming  | and Packaging Technology  | Derivatives with Refining &   |
| * Floriculture Hand Book   | * Modern Tech. of Tomato  | Packaging Technology  |
| (Flowers Growing Technology)   | Processing & Dehydration  | * Technology of Oilseeds  |
| * Aloe Vera Cultivation,   | (Ketchup, Juice, Paste, Soup  | Processing, Oils & Fats   |
| Processings, Formulations and  | & Drying)   | and Refining  |
| Manufacturing Technology   | * Technology of Food  | <b>ESSENTIAL OILS &amp; AROMATIC</b>  |
| DAIRY FARM, MILK PROCESSING  | Chemicals, Pigments<br>& Food Aroma Compd.  | * Essential Oils Manufacturing  |
| AND ICE CREAM  | * Modern Technology of Agro   | & Aromatic Plants   |
| * Hand Book of Dairy   | Processing & Food Packaging   | * Modern Technology of  |
| Formulations, Processes &  | Products with Project   | Essential Oils  |
| Milk Processing Industries * Milk Processing and Dairy   | Profiles  | * Technology of Perfumes,   |
| Products Industries  | POULTRY FARM, HATCHERY &  | Flavours & Essential Oils   |
| * Hand Book of Dairy Farming to  |   | * Essential Oils Processes  |
| Produce Milk with Packaging  | CHICKEN MEAT TECHNOLOGY   | & Formulations  |
| * Hand Book of Ice Cream Technology and Formulae   | * Technology of Chicken Meat  | PERFUMES AND FLAVOURS   |
| * Hand Book of Milk Processing,  | and Poultry Products  | * Hand Book of Flavours &   |
| Dairy Products and Packaging   | * Poultry Farming, Hatchery &   | Food Colourants Technology  |
| Technology  * Dairy Farming for Milk   | Broiler Production * Poultry Farm & Feed Formulae   | * H. B. of Perfumes & Flavours  |
| Production Technology  | •   | * Hand Book of Perfumes with Formulations (2nd Edn.)  |
| * Commercial Dairy Farming   | WOOD, PLYWOOD, PARTICLE,  | * Technology of Perfumes,   |
| with Project Profiles  | BOARD, BAMBOO & FOREST  | Flavours & Essential Oils   |
| HERBS CULTIVATION/MEDICINES  |   | * H.B. of Flavours Technology   |
| * Herbs, Medicinal & Aromatic  | Veneer, Plywood, Particle   | SOLAR PV PANELS,  |
| Plants Cultivation   | Board, Fibreboard, Bamboo<br>& Forest Products  | ENERGY, CELLS   |
| Aushidhi and Sungndhit     Paudho Ka Vaysayik (Hindi)  |   |   |
| * Aromatic & Medicinal Plants  | SOAP, DETERGENT & ACID SLURRY   | * Technology Of Solar Pv Panels,<br>Energy, Cells, Lantern, Cooler,   |
| and Biodiesel (Jatropha)   | * Household Soap,Toilet   | Light System, Cfl Inverter,   |
| * Hand Book of Medicinal &   | Soap & Other Soap   | Photovoltaic System, Power  |
| Aromatic Plants (Cultivation,  | * Profitable Small Scale Mfr.   | Plant, Water Heater, Collector,   |
| Utilisation & Extraction Processes)  |   |   |
|  | of Soaps & Detergents   | Solar Cooling, Refrigeration,   |
| FOOD & AGRO PROCESS, TOMATO  | * Synthetic Detergents with   |   |
| · · · · · · · · · · · · · · · · · · ·  | * Synthetic Detergents with<br>Formulations (2nd Edn.)  | Solar Cooling, Refrigeration,<br>Solar Drying, Tractor, Home<br>System, Dish Engine,  |
| PROCESSING, PRESERVATION,  | * Synthetic Detergents with Formulations (2nd Edn.) * Modern Technology of Acid   | Solar Cooling, Refrigeration,<br>Solar Drying, Tractor, Home<br>System, Dish Engine,<br>Nanotechnology & Other Solar  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE,   | * Synthetic Detergents with<br>Formulations (2nd Edn.)<br>* Modern Technology of Acid<br>Slurry, Surfactants, Soap and  | Solar Cooling, Refrigeration,<br>Solar Drying, Tractor, Home<br>System, Dish Engine,  |
| PROCESSING, PRESERVATION,<br>DEHYDRATION, FRUIT BEVERAGE,<br>POTATO, MAIZE, MEAT, BANANA   | * Synthetic Detergents with Formulations (2nd Edn.) * Modern Technology of Acid   | Solar Cooling, Refrigeration,<br>Solar Drying, Tractor, Home<br>System, Dish Engine,<br>Nanotechnology & Other Solar<br>Products Manufacturing  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA * Fruits & Vegetable Processing   | Synthetic Detergents with Formulations (2nd Edn.)     Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  | Solar Cooling, Refrigeration,<br>Solar Drying, Tractor, Home<br>System, Dish Engine,<br>Nanotechnology & Other Solar<br>Products Manufacturing  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing  | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing BUILDING MATERIAL & CHEMICALS  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing  | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste  | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing BUILDING MATERIAL & CHEMICALS * Technology of Building Materials   |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents,   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing BUILDING MATERIAL & CHEMICALS * Technology of Building Materials & Chemicals with Processes  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing  | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING   |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing,   |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent  | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring,  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat  | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal  | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)   |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  **COSMETICS TECHNOLOGY*   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)   |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food Preservation & Processing   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  **COSMETICS TECHNOLOGY** (SYNTHETIC & HERBAL)   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food   | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  COSMETICS TECHNOLOGY (SYNTHETIC & HERBAL)  * Cosmetics Processes &  | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  SPICES & COLD STORAGE   |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food Preservation & Processing  * Hand Book of Food  | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  * COSMETICS TECHNOLOGY (SYNTHETIC & HERBAL)  * Cosmetics Processes & Formulations Hand Book   | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  SPICES & COLD STORAGE  * Spices & Packaging with Formula  |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food Preservation & Processing  * Hand Book of Food Packaging Technology  * Agro Based & Processed Food Products                               | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  COSMETICS TECHNOLOGY (SYNTHETIC & HERBAL)  * Cosmetics Processes & Formulations Hand Book  * Herbal Cosmetics & Beauty                            | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  SPICES & COLD STORAGE  * Spices &Packaging with Formula  * Start Your Own Cold Storage Unit  PULP & PAPER TECHNOLOGY                              |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food Preservation & Processing  * Hand Book of Food Packaging Technology  * Agro Based & Processed Food Products  * Potato & Potato Processing | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  COSMETICS TECHNOLOGY (SYNTHETIC & HERBAL)  * Cosmetics Processes & Formulations Hand Book  * Herbal Cosmetics & Beauty Products with Formulations | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  SPICES & COLD STORAGE  * Spices &Packaging with Formula  * Start Your Own Cold Storage Unit PULP & PAPER TECHNOLOGY  * H.B.of Pulp & Paper, Paper |
| PROCESSING, PRESERVATION, DEHYDRATION, FRUIT BEVERAGE, POTATO, MAIZE, MEAT, BANANA  * Fruits & Vegetable Processing Hand Book (2nd Edn.)  * Fruit Beverage & Processing with Mango  * Food Processing & Agro Based Industries (2nd Edn.)  * Preservation & Canning of Fruits and Vegetables  * Hand Book of Food Dehydration & Drying  * Meat Processing & Meat Products Hand Book  * Technology of Food Preservation & Processing  * Hand Book of Food Packaging Technology  * Agro Based & Processed Food Products                               | * Synthetic Detergents with Formulations (2nd Edn.)  * Modern Technology of Acid Slurry, Surfactants, Soap and Detergents with Formulae  * Complete Technology Book on Detergents with Formulations (Detergent Cake, Dishwashing Detergents, Liquid &Paste Detergents, Enzyme Detergents, Cleaning Powder & Spray Dried Washing Powder)  * Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal Detergents and Perfumes with Formulations  COSMETICS TECHNOLOGY (SYNTHETIC & HERBAL)  * Cosmetics Processes & Formulations Hand Book  * Herbal Cosmetics & Beauty                            | Solar Cooling, Refrigeration, Solar Drying, Tractor, Home System, Dish Engine, Nanotechnology & Other Solar Products Manufacturing  BUILDING MATERIAL & CHEMICALS  * Technology of Building Materials & Chemicals with Processes  TEXTILE, GARMENTS, DYEING  * Mod. Tech. of Bleaching, Dyeing, Printing & Finishing of Textiles  * Technology of Textiles (Spinning & Weaving, Dyeing, Scouring, Drying, Printing and Bleaching)  * Garments Manufacturing Technology  SPICES & COLD STORAGE  * Spices &Packaging with Formula  * Start Your Own Cold Storage Unit  PULP & PAPER TECHNOLOGY                              |

## LIST OF PUBLICATIONS/BOOKS PUBLISHED BY: ENGINEERS INDIA RESEARCH INSTITUTE 4449, NAI SARAK, MAIN ROAD, DELHI - 6 (INDIA)

Name of Books

## NON WOVEN TECHNOLOGY

\* Complete Tech. of Nonwovens Fabrics, CarryBags, Composite, Geotextiles, Medical Textiles, Fibres, Felts, Apparels, Spunlace and Absorbent Nonwoven

## PHARMACEUTICALS & DRUGS

 Pharmaceuticals and Drugs Technology with Formulations

## LEATHER & LEATHER PRODUCTS

 Hand Book of Leather & Leather Products Technology

## **BIOTECHNOLOGY**

\* Hand Book of Biotechnology

## **CERAMICS & CERAMIC PROCESS**

H.B.of Ceramics & Ceramics
Processing Technology

## TREE FARMING

\* Hand Book of Tree Farming

## MUSHROOM PROCESSING

 Hand Book of Mushroom Cultivation, Processing & Packaging

## **BIOFERTILIZERS & VERMICULTURE**

\* Biofertilizers & Vermiculture

## BIODEGRADABLE PLASTICS AND POLYMERS

\* Modern Technology of Biodegradable Plastics and Polymers With Processes (Bio-Plastic, Starch Plastics, Cellulose Polymers and Others) \* Production of Biodegradable Plastics and Bioplastics

## FROZEN FOOD AND FREEZE DRYING

Complete Hand Book on Frozen Food Processing & Freeze Drying Technology

\* Modern Technology of Frozen Food Products

## Name of Books MINERAL AND MINERALS

 Hand Book of Minerals and Minerals Based Industries

## RUBBER CHEMICALS, COMPOUNDS & RUBBER INDUSTRIES

- Rubber Chemicals & Processing Industries
- \* Modern Rubber Chemicals, Compounds & Rubber Goods Technology
- Technology of Rubber & Rubber Goods Industries

### **AYURVEDIC MEDICINES**

Ayurvedic & Herbal Medicines with Formulaes Hand Book of Ayurvedic Medicines with Formulations (A Complete Hand Book of Ayurvedic & Herbal Medicines)

## STAINLESS STEEL, NON FERROUS METALS, BILLETS & ROLLING MILL

Modern Technology of Non Ferrous Metals and Metal Extraction

\* Processing Technology of Steels and Stainless Steels

\* Modern Technology of Rolling Mill, Billets, Steel Wire, Galvanized Sheet, Forging & Castings

Manufacturing Technology of Non-Ferrous Metal Products

## FOOD ADDITIVES/CHEMICALS AND SWEETENERS & FOOD EMULSIFIERS

\* Modern Technology of Food Additives, Sweeteners and Food Emulsifiers

\* Technology of Food Chemicals, Pigments and Food Aroma Compounds

## **DISPOSABLE MEDICAL PRODUCTS**

 \* Technology of Disposable Medical Products

## SOYA MILK, TOFU & SOY PRODUCTS

\* Technology of Soya Milk, Tofu, Hydrolyzate, Allied Soyabean Products with project Profiles \* Technology of SOYBEAN

Products with Formulae

### Name of Books

## PRODUCTS FROM WASTE

Technology of Products from Wastes (Industrial, Agriculture, Medical, Municipality, Organic & Biological) By Panda Products from Waste Technology Hand Book

## WINE PRODUCTION

\* Technology of Wine Production and Packaging

## ORGANIC FARMING & FOOD/NEEM

 Hand Book of Organic Farming and Organic Foods with Vermi-Composting & Neem Product

## FISH FARMING & FISHERY PRODUCTS

 Hand Book of Fish Farming and Fishery Products

## **TEXTILE AUXILIARY & CHEMICALS**

Textile Auxiliaries and Chemicals with Processes & Formulations

Technology of Textile Chemicals with Formulation

\* Modern Technology of Textile Auxiliary and chemicals with formulations

\* Textile Processing Chemicals, Enzymes, Dye Fixing Agents and Other Finishes with Project Profiles

## DISINFECTANTS, CLEANERS, PHENYL, DEODORANTS, DISHWASHING DETERGENTS ETC.

Manufacture of Disinfectants, Cleaners, Phenly, Repellents, Deodorants, Dishwashing Detergents & Aerosols with Formulations

## **COFFEE & COFFEE PROCESSING**

Start Your Own Coffee & Coffee Processing

## CASTING TECHNOLOGY

Casting Technology Hand Book

## ONION DEHYDRATION

Onion Cultivation, Dehydration, Flakes, Powder, Processing & Packaging Technology

Send Draft in favour of "Engineers India Research Institute" (Postage Rs. 100/- Extra)

## ENGINEERS INDIA RESEARCH INSTITUTE

Regd. Off: 4449, Nai Sarak, Main Road, Delhi - 110 006 (India)

\* Ph: +91 9811437895, 9811151047, 91-11-23918117, 23916431, 45120361, 23947058, 64727385

E-Mail: eiriprojects@gmail.com, eiribooks@yahoo.com
\*Website: www.eiriindia.org, www.industrialprojectreports.com

Deposit the amount in "EIRI "Account with HDFC BANK - 05532020001279 (RTGS/NEFT/IFSC CODE: HDFC0001981) OR ICICI BANK - 038705000994 (RTGS/NEFT/IFSC CODE: ICIC0000387) OR AXIS Bank Ltd. - 054010200006248 (RTGS/NEFT/IFSC CODE: UTIB0000054) OR UNION BAK OF INDIA -307201010015149 (RTGS/NEFT/IFSC CODE: UBIN0530727) OR STATE BANK OF INDIA -30408535340 (RTGS/NEFT/IFSC CODE: SBIN0001273) AND JUST SMS US ON PH. +91 9811437895

## LIST OF THE READY AVAILABLE E-BOOKS BY EIRI. CONTACT AT eiribooks@yahoo.com for price

- Adhesive Technology and formulations hand book (Hand Book of Adhesives)
- 02. Agro Based & Processed food Prd.
- 03. Agro food Processing & Packaging 04. Aloe Vera Cultivation, Processings,
- Formulations & Manufacturing Tech.
  05. Complete Book on Banana Cultivation
  Dehydration, Ripening, Processing,
  Products & Packaging
- 06. Citrus Fruits cultivation & Processing 07. Commercial Dairy farming to produce
- milk with project profiles
  08. Complete Handbook on frozen food
- 08. Complete Handbook on frozen food processing & freeze drying technology
- 09. Dairy farming for milk production
- 10. Technology of Synthetic Resin & Emulsion Polymers
- 11. Floriculture Hand Book (Hand book of flowers growing technology)
- 12. Fruit Beverages and Processing with Mango Products
- 13. Modern Technology of Printing Inks
- 14. H. B. of Biofertilizers & Vermiculture
- 15. H. B. of Adhesives with formulaes
- 16. Hand Book of Aromatic & Medicinal plants and Biodiesel (Jatropha)
- 17. Hand Book of Ayurvedic Medicines with formulations
- 18. Dairy Farming to Produce Milk/Packg 19. Hand Book of Electroplating Anodizing
- & Surface finishing technology
- 20. Hand Book of Flavours Technology 21. H.B. of Food Dehydration & Drying
- 22. Garments Manufacturing Technology
- 23. Hand Book of Goat Farming
- 24. Ice Cream Technology and formulae
- 25. Hand Book of Lubricants, Greases and Petrochemicals Technology
- 26. Medicinal & Aromatic Plant Cultivation Utilisation & Extraction Processes
- 27. Mushroom Cultivation, Prsg & Packing
- 28. Technology of Reinforced Plastics
- 29. Rotational Moulding Technology
- 30. Technology of Sweets, Namkeen and Snacks Food with Formulae
- 31. Technology of Coatings, Resins, Pigments & Inks Industries
- 32. Confectionery, Chocolates, Toffee, Candy, Chewing & Bubble Gums, Lollipop & Jelly products with formulae
- 33. Technology of Food Preservation and Processing
- 34. Tech. of Food Processing Industries
- 35. Technology of Perfumes, Flavours and Essential Oils
- 36. Technology of PVC Compounding and Its Applications
- 37. Technology of Rubber & Rubber Goods Industries
- 38. Technology of Sweets (Mithai) with Formulae39. Technology of Synthetic Dyes,
- Pigments & Intermediates
  40. Technology of Oilseeds Processing.

- Oils & Fats and Refining
- 41. Textile Auxiliaries and Chemicals with Processes & Formulations
- 42. Hand book of Offset Printing Technology, Pre-Press, Plate Making, Web Offset, Newspaper Production
- Organic Farming & Organic Foods with Vermi-Composting & Neem Products
   Hand Book of Packaging Technology
- 45. Plastic Materials & Processing Tech.
- 46. Poultry Farming & Feed Formulations 47. Hand Book of Prepress
- 48. Hand Book of Spices & Packaging
- with Formulaes
  49. Ceramics & Ceramics ProcessingTech
- 50. Injection Moulding of Plastics
- 51. Manufacture of Snacks Food, Namkeen, Pappad & Potato Products
- 52. Manufacturing Technology of Non-Ferrous Metal Products
- 53. Chicken Meat and Poultry Products
- 54. Meat Processing & Meat Products H.B
- 55. Water & Packaged Drinking Water56. Modern Tech of Frozen Food Products
- 57. Modern Technology of Non-Ferrous
  Metals and Metal Extraction
- 58. Modern Bakery Tech. & Fermented Cereal Products with Formulae 59. Modern Bee Keeping and Honey Processing Technology
- 60. Acid Slurry, Surfactants, Soap and Detergents with formulae
- 61. Modern Technology of Extrusion & Extruded Products
- 62. Rolling Mill, Billets, Steel Wire, Galvanized Sheet, Forging & Castings
- 63. Pet Bottles, Preform & Pet Recycling
- 64. Plastic Additives Technology Hand Book
- 65. Plastic Waste Recycling Technology 66. Potato & Potato Processing Technology
- 67. Profitable Businesses to Start for Entrepreneurs
- 68. Profitable Small, Cottage, Tiny and Home Industries.
- 69. Technology of Reinforced Plastics
- 70. Rotational Moulding Technology
- 71. Tomato Processing & Dehydration-Ketchup, Juice, Paste, Puree, Soup and Drying
- Nonwovens-Fabrics, Carrybags, Composites, Geotextiles, Medical Textiles, Fibres, Felts, Apparels, Spunlace & Absorbent Nonwovens
- 73. Soybean Products with Formulae74. Agro Processing and Food Packaging Products with Project Profiles
- 75. Soya Milk, Tofu, Hydrolyzate, allied Soyabean Product with Project Profiles
- 76. Products from Waste Technology 77. Food Additives. Sweeteners
- 78. Food Chemicals, Pigments and Food
- Aroma Compounds
- Technology of Glue and Adhesives with Adhesives Bonding and

Formulations

- 80. Coffee Processing Hand Book 81. Casting Technology HandBook
- 82. Powder Coating Technology
- 83. Poultry Farming, Hatchery & Broiler Production
- 84. Wine Production and Packaging
- Modern Technology of Bioprocessing
   Profitable Small Scale Manufacture of Cosmetics (Synthetic/Herbal)
- 87. Technology of Herbal Cosmetics and Toiletries Products with Formulae
- 88. Tech of Maize & Allied Corn Products 89. Complete Hand Book on Adhesives
- & Adhesion Tech. with Project Profiles
- 90. Hand Book of Tree Farming
- 91. Hand Book of Pig Farming
- 92. Paints & Coatings with Formulations 93. E-Book Formulations on Nail
- 93. E-Book Formulations on Nail Enamel & Nail Polish Removers
- 94. E-Book Formulations on Herbal Hair
  Oils & Hair Lotions, Hair Vitalizer,
- Hair Styling Gel & Afro Products
  95.E-Book on Herbal Cold Cream,
- Moisturizing Cream with Aloevera & Fairness Creams
- 96. Onion Cultivation, Dehydration, Flake, Powder, Processing & Packing
- 97. Modern Technology Of Textile Auxiliary And Chemicals With Formulations
- 98. Identification of Plastics and other Plastic Processing Industries
- 99. Modern Technology of biodegradable Plastics and Polymers with Bio-Plastics, Starch Plastic, Cellulose Polymers and Others
- 100.Manufacture of Washing Soap, Toilet Soap, Detergent Powders, Liquid Soap & Herbal detergents and Perfumes with Formulations
- 101.Complete Technology Book on Detergents with Formulations
- 102. Manufacture of Disinfectants, Cleaners, Phenyl, Repellents, Deodrants, Dishwashing Detergents and Aerosols with Formulations
- 103. Complete Book on Identification of Plastics and Plastic Product Materials
- 104. Technology of Solar PV Panels, Energy, Cells, Lantern, Cooler, Light System, CFL Inverter, Photo Voltaic System, Power Plant etc.(A Complete handbook on Solar & Solar Products)
- 105. Modern Technology of Textile
  Auxiliary & Chemicals with Formulae
- 106. Thinners, Putty, Wall & Industrial Finishes and Synthetic Resins
- 107.Hand Book of Leather and Leather Products Technology

Immediate Delivery by Email, PDF Copy

## LIST OF THE CD ROMS DEVELOPED BY: ENGINEERS INDIA RESEARCH INSTITUTE 4449, NAI SARAK, MAIN ROAD, DELHI - 6 (INDIA)

MULTIPLE PROJECT REPORTS IN MULTIPLE PROJECT REPORTS IN MULTIPLE PROJECT REPORTS IN **CD-ROM AT ECONOMY COSTS CD-ROM AT ECONOMY COSTS CD-ROM AT ECONOMY COSTS** 

- 5 Ginger Based Projects
- 6 Agarbatti and Allied Projects
- **6 Lucrative Project on Thinners**
- 7 Power Based Projects
- 8 Mango and Mango Based Projects
- 9 Poultry Farming, Chicken **Processing and Hatchery Projects**
- 9 Tea Plantation & Processing **Based Indstries**
- 9 Wheat and Wheat Projects
- 10 Coconut & Coconut By Products
- 10. 10 Leather Tanning, Garments, Footwear, Chemicals Industries
- 11. 10 Maize & Corn Processing **Projects**
- 12. 10 Molasses Based Lucrative **Projects**
- 13. 11 InfoTech/IT Lucrative Projects
- 14. 11 Solar & Solar Based Products
- 15. 12 Mosquitoes Preventive Projects
- 16. 13 Fish Farming & Fishery Projects
- 17. 14 Potato & Potato based Projects
- 18. 14 Roasted/Salted Cashew Nuts, Almonds, Namkeens, Spices
- 19. 15 Profitable 1 to 1.5 Cr. Projects
- 20. 16 Multi Crores Profitable Projects (Above 50 Cr Projects)
- 21. 16 Food Processing & Pharma
- 22. 19 Multi Crores Profitable Projects (From 1-10 Cr. Projects)
- 19 Rice Husk, Bagasse & Molasses **Based Profitable Projects**
- 24. 20 Automotives, Refrigerators/Air Conditioners, Display Coolers, Kitchen Products, Rolling Mills
- 25. 20 Copper & Copper Based Industry
- 26. 21 Bakery & Allied Projects
- 27. 22 Alcohol, Beer, IMFL, Country Liquor, Wine & Other Related **Projects**
- 28. 23 Canning, Dehydration, Dairy, Jatropha, Fish & Other Projects
- 23 Dairy Farming, Dairy Products & Other Milk Processing Industry
- 30. 23 Injection Moulded Plastic Products
- 31. 23 Profitable Construction Projects
- 32. 24 Fruits/Veg. and Allied Food **Dehydration Projects**

- 33. 24 Lubricating Oils, Greases, Brake Oils, Bitumen, Transformer Oil, Reclamation of Used Engine Oils, **Cutting Oils and Allied Projects**
- 24 Soap & Detergents
- 35. 25 Ayurvedic/Herbal Pharmacy and **Cosmetic Products**
- 36. 25 PVC (Polyvinyl Chloride) & PVC **Based Profitable Projects**
- 37. 26 New Educational Projects (Schools, Colleges, Training/ Management Institutes, Hostels etc.
- 38. 28 Fruit Juices. Food Dehydration & **Allied Projects**
- 28 Multi Crores Profitable Projects (10 Cr. to 50 Cr.)
- 40. 28 Profitable Multcrores Projects (2 Cr. to 8 Cr.)
- 41. 28 Multicrore Lucrative Projects (100 Cr. to 300 Cr.)
- 42. 28 Surgical & Disposable Projects
- 43. 29 New Profitable (1.5 Cr. to 3 Cr.) **Projects**
- 44. 30 Chemicals, Mechanicals, Packaging & Other Profitable **Projects**
- 45. 31 Essential Oils, Perfumes, Flavours & Aromatic Perfumery
- 46. 31 Profitable Plantation, Cultivation and Farming Projects
- 47. 33 Sweets, Namkeen, Snacks etc.
- 48. 35 Gums, Adhesives & Resins **Projects**
- 49. 35 Profitable New Industries
- 50. 36 Printing & Allied Projects
- 51. 37 Aluminium & Aluminium Industry
- 52. 38 Biofertilizer, Biofuel, Enzyme, Organic Farming & Manure, Protein & Allied Lucrative Projects
- 53. 41 Plastic Extrusion and Extruder **Based Industries**
- 54. 42 Electroplating, Anodizing **Projects**
- 55. 42 Hospitality, Building Materials, Power, Steels, Alcohol & Food
- 56. 42 Paper & Pulp, Paper Board & Paper Converting Industries
- 57. 43 Automobile Parts, Gears, Polish, Petrol Pump, Components, Service

- Station & Other Acces.
- 58. 43 Iron, Steel, Casting Fabrication, Wire Drawing & Rolling Mills **Projects**
- 59. 44 Textile, Garments, Hosiery & **Allied Products**
- 45 Profitable Chemicals and Allied
- 61. 45 InfoTech/IT, Hospitility, Hospital, College, School, Medical, **Entertainment Club, Ware Housing & Real Estate Projects**
- 46 Projects on Infrastructure, Real Estate, Hotels, Hospitals, Hospitility
- 50 Electrical, Electronic & Computer/IT Based Industries
- 64. 52 Cosmetics (Herbal & Synthetics) **Projects**
- 65. 52 Food, Dairy, Bakery, Confectionery & Snacks Projects
- 52 Small Scale 25 to 50 Lacs
- **Investment Projects**
- 67. 54 Paints, Varnish, Solvent Lacquers, Resins, Enamel Powder **Coating Projects**
- 68. 55 Profitable Products from Agro & Other Industries Wastes
- 69. 56 Agro Based & Food Processing **Projects**
- 70. 57 Small Scale 50 Lacs to 1 Crore **Investment Projects**
- 71. 63 Multi Crores Profitable Project (2 Cr. to Rs. 2500 Cr.)
- 72. 63 Packaging & Allied Projects
- 73. 67 Rubber & Rubber Goods Industry
- 74. 75 Entertainment, Infotech, Educational, Management
- 75. 83 Exports Oriented Units Projects
- 76. 92 New Lucrative Projects
- 77. 99 Printing & Packaging Projects
- 78. 100 Food Processing and Agro **Based Profitable Projects**
- 100 Plastic, Polymer & Allied **Projects**
- 80. 160 New Exports Oriented Units and Most Profitable Projects
- 81. 212 Highly Demandable Profitable **Projects**

## **TERMS AND CONDITIONS**

Ask for the quotation for the required above mentioned Cd-Roms containing multiple project reports at eiritechnology@gmail.com or eiriprojects@gmail.com Mob: +91 9811437895 or +91 9811151047

Note: To avoid Courier Expenses (for overseas clients only), PDF copies can be emailed within 2 working days.



## ENGINEERS INDIA RESEARCH INSTITUTE

Website: www.eiriindia.org,