

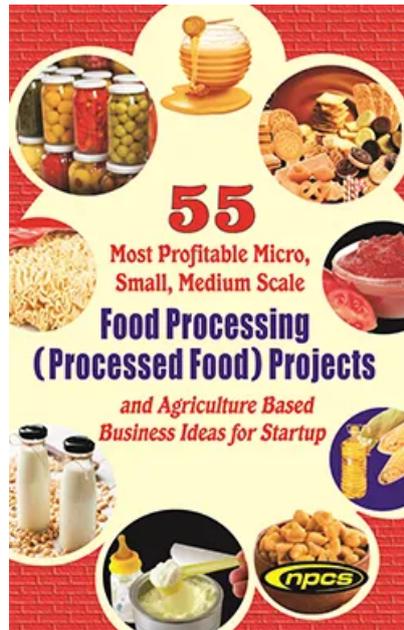
106-E, Kamla Nagar, New Delhi-110007, India.

Tel: 91-11-23843955, +91 9097075054

Mobile: +91-9097075054

Email: npcs.ei@gmail.com, info@entrepreneurindia.co

Website: www.entrepreneurIndia.co



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

<b>Code</b>	NI316
<b>Format</b>	paperback
<b>Indian Price</b>	₹0
<b>US Price</b>	\$0
<b>Pages</b>	392
<b>ISBN</b>	9789381039908
<b>Publisher</b>	NIIR PROJECT CONSULTANCY SERVICES

### Description

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

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

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

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

The Major Contents of the are Book Soy Flour & Milk, Starch Derivatives, Saccharin, Tomato Paste, Edible Corn Oil, Malt, Instant Noodles, Garlic Oil and Powder, Cattle Feed, Banana Wafers, Biscuits, Bread, Candy, Chocolates, Potato Chips, Rice Flakes (Poha), Corn Flakes, Baby Cereal Food, Fruit Juice, Milk Powder, Paneer, Papad, Ghee, Extruded Food (Kurkure Type), Instant Tea, Jam & Jelly, Khakhra, Soft Drinks, Spices, Sweet Scented Supari, Cake & Pastry, Banana Chips, Papad, Besan, Pickles, Ice-Cream Cones, Honey, Flour Mill, Tutti-Fruitti, Confectionery, Noodles, Ice Candy, Namkeen, Vermicelli, Mango Pappad (Aam Papad), Chilli Powder, Popcorn, Supari Chips, Revadi and Gazak, Mava, Tomato Sauce and Ketchup, Ice Cream, Baking Powder, Moong Dal

Bari, Packaged Drinking Water With Pet Bottles, Food Packaging & Labelling, Good Manufacturing Practices in Food Industry, Manufacturing Process, Process Flow Diagrams, Addresses of Plant & Machinery Suppliers, Photographs of Machineries.

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

## Content

### 1. INTRODUCTION

Reasons for Growth in Demand of Processed Food in India

Growth Drivers

Future of Packaged Food Industry in India: Drivers and Barriers

Importance of Food Packaging in Food Industry

Food Labeling

### 2. SOY FLOUR & MILK

Physical Characteristics & Chemical Composition of the Soybean

Chemical Composition

Representative Proximate Composition

Uses

Raw Material

For Soy Flour

For Soy Milk

Process Description

1. Soy Flour Process Description

2. Soy Milk Process Description

Process Flow Diagram

Soy Flour

Machinery Required for Soy Flour

Soy Milk

Machinery Required for Soy Milk

### 3. STARCH DERIVATIVES

Uses

Some Important Definitions

Raw Material

Process Description

General Process Flow for Starch-Derived

Sweeteners (Corn/Glucose Syrups, High Fructose Syrups, Dextrose, Fructose, Maltodextrins and Syrup Solids)

1. Glucose Syrup

Dextrose Syrup

Sorbitol

#### 4. SACCHARIN

Properties of Saccharin

Uses in Foods and Other Products

Process Description

Chlorosulfonic Acid Synthesis Process

Sulfonation

Amination and Refining

Oxidation Process

Concentration and Crystallization

Drying and Packing Process

Recovery of Oxidizing Agent and Catalyst

Raw Material

Flow Diagram

Machinery Required

#### 5. TOMATO PASTE

Uses

Raw Material Requirements

Raw Material

Process Description

Receiving

Sorting

Juice Extraction

Evaporation

Aseptic Filling

Machinery Required

#### 6. EDIBLE CORN OIL

Process Description

## Required Machinery

### 7. MALT

Standard Malt and Specialty Malt

Barley Conditioning

Malting

Malt Treatment

Process Flow Diagram

Machinery Required

### 8. INSTANT NOODLES

Manufacturing Process

Processing and Classification of Instant Noodles

Machinery Required

### 9. GARLIC OIL AND POWDER

Composition

Uses

Process Description

Process Flow Diagram

Machinery Required

### 10. CATTLE FEED

Raw Materials for Concentrate Feeds

Process Description

Reception of Raw Material

Storage of Raw Materials

Blending

Grinding

Process Flow Diagram

Machinery Required

### 11. BANANA WAFERS

Manufacturing Process

Description of Manufacturing Process

Detail Process

Process Flow Diagram

## 12. BISCUITS

Uses & Applications

Basic Raw Material for Biscuits

Manufacturing Process

Manufacturing Process Flow Diagram

## 13. BREAD

Properties

Raw Material

Formulation of Bread

Manufacturing Process

Process Flow Sheet

## 14. CANDY

Uses of Candy

Raw Material for Candy

Sugar

Corn Syrup/Glucose Syrup

Water

Properties of High-Boiled Candy

Candy Manufacturing Process

Process Flow Diagram

## 15. CHOCOLATES

Uses

Composition of Fermented Cocoa Beans

Raw Material

Sweet Dark Chocolate

Semi-Sweet or Bittersweet Dark Chocolate

Milk Chocolate

White Chocolate

Formulations

Dark Chocolate

Milk Chocolate

Manufacturing Process

1. Roasting and Winnowing the Cocoa

2. Grinding the Cocoa Nibs

3. Blending Cocoa Liquor and Molding Chocolate  
Milk Chocolate  
White Chocolate  
Plain Dark Chocolate  
Process Flow Diagram

## 16. POTATO CHIPS

Composition of Fresh & Fried Potato  
Uses & Application Manufacturing Process  
(1) Sorting, Cleaning & Washing  
(2) Slicing and Washing  
(3) Drying of Slices  
Chip Frying  
Packaging  
Process Flow Diagram

## 17. RICE FLAKES (POHA)

Uses & Applications Composition of Rice  
Manufacturing Process  
Process Flow Diagram

## 18. CORN FLAKES

Uses and Applications Properties  
Manufacturing Process  
Grain Cleaning Section  
Corn Grit Section  
Corn Flake Section  
Process Flow Diagram

## 19. BABY CEREAL FOOD

Uses & Applications  
Properties of Cereal Food  
Infant Cereals Manufacturing Process  
Raw Materials  
Wet Mixing Plant  
Packing  
Infant Milk Manufacturing Process

- Mixing Ingredients
- Pasteurization
- Homogenization
- Standardization
- Heat Treatment or Sterilization
- Dry Blending

Packaging

Muesli Manufacturing Process

Ingredients

Process Flow Diagram

## 20. FRUIT JUICE

Classification of Fruit Juice

Uses & Applications

Properties

Raw Material Requirement

Manufacturing Process

Packing

Storage

Process Flow Diagram

## 21. MILK POWDER

Uses of Milk Powder

Composition of Milk-Powder

Property of Milk Powder

Milk Powder Production Process

- Separation/ Standardization
- Preheating
- Evaporation
- Spray Drying
- Packaging and Storage

Process Flow Diagram

## 22. PANEER

Various Uses

Functional Properties

Classification of Cheese

Composition of Paneer

Manufacturing Process  
Process Flow Diagram

## 23. PAPAD

Uses & Applications  
Formulation for Papad  
Manufacturing Process  
Process Flow Diagram

## 24. GHEE

Uses of Ghee  
Nutritional benefits of Ghee  
Properties of Ghee  
n Physical Properties  
n Chemical Properties  
Composition of Ghee  
Process  
Manufacture of Ghee

## 25. EXTRUDED FOOD (KURKURE TYPE)

Properties of Kurkure Type Products  
Formulation of Kurkure  
Manufacturing Process  
Manufacturing Process Flow Diagram

## 26. INSTANT TEA

Uses  
Composition of Tea  
Properties  
Manufacturing Process  
Process Flow Diagram

## 27. JAM & JELLY

Essential Ingredients  
Formulation for Jams  
The Manufacturing Process for Jam & Jelly  
Inspection  
Cleaning, Crushing and Chopping

Pasteurizing the Fruit  
Cooking the Jam and Jelly  
Filling the Jars  
Labeling and Packaging  
Process Flow Diagram for Jam Process Flow Diagram for Jelly

## 28. KHAKHRA

Uses and Applications  
Nutrition Facts of Khakhra  
Manufacturing Process of Khakhra  
Process Flow Diagram

## 29. SOFT DRINKS

Ready-to-Drink Products  
Concentrated Soft Drinks  
Properties  
Components of a Soft Drink  
Manufacturing Process  
Packing  
Cold-filling  
Process Flow Diagram

## 30. SPICES

Uses & Applications  
General Manufacturing Procedure  
Process Flow Diagram

## 31. SWEET SCENTED SUPARI

Uses and Applications  
Properties  
Formulation of Scented Supari  
For Scented Coloured Supari  
Process Description  
Process Flow Diagram

## 32. CAKE & PASTRY

Introduction  
Market Opportunities  
Features

Raw Material  
Cake  
Pastry  
Bakery Moulds  
Requirements  
Wheat Flour  
Eggs  
Milk Power  
Ghee  
Making Process  
Flow Chart of Bakery

### 33. BANANA CHIPS

Introduction  
Market Potential  
Demand and Supply  
Marketing Strategy  
Selling and Distribution Overheads  
Ingredients  
How to make Banana Chips  
Process Flow Diagram  
Equipments  
Requirements  
Banana  
Aluminum Utensils  
Chips Cutter Electric Motor  
Sealing Machine  
Weighing Scale

### 34. PAPAD

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Papad Making Machine  
Flour Kneading Machine

### 35. BESAN

Raw Materials

Manufacturing Process  
Cleaning  
Conditioning  
Milling  
Finishing  
Main Machinery and Equipments  
Gram Dal  
Pulveriser Machine

### 36. PICKLES

Product  
Raw Materials  
Manufacturing Process  
Machinery and Equipments  
Pickles  
Cap Sealing Machine  
Serrated Slicer

### 37. ICE-CREAM CONES

Raw Materials  
Manufacturing Process  
Machinery Required  
Ice-cream Cones  
Cone-Making-Machine  
Storage Racks

### 38. HONEY

Main Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Honey  
Honey Stirrer  
Weighing Balance  
Heating Equipments

### 39. FLOUR MILL

Market Potential  
Raw Materials

Manufacturing Process  
Machinery and Equipments  
Flour  
Roller Mill Body  
Weighting Machine

#### 40. TUTTI-FRUITTI

Raw Materials  
Production Process  
Main Machinery and Equipments  
Peeling Machine  
Stainless Soaking Tanks

#### 41. CONFECTIONERY

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Confectionery  
Chips Cutting Machine  
Balance Scale

#### 42. NOODLES

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Noodles  
Noodle Making Machinery

#### 43. ICE CANDY

Manufacturing Process  
Raw Materials  
Main Machinery and Equipments  
Complete Ice-Candy Machine  
Churner  
Ice-Cream Mixer

#### 44. NAMKEEN

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Namkeen  
Namkeen Making Machine  
Hydroextractor  
45. VERMICELLI

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Vermicelli  
Vermicelli Making Machine  
Mixing Machine  
Weighing Balance

#### 46. MANGO PAPPAD (AAM PAPAD)

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Aam Papad  
Mango Peeler Machine  
Mixer  
Storage Tanks

#### 47. CHILLI POWDER

Raw Material  
Manufacturing Process  
The Process Flow Chart is as under  
Main Machinery and Equipments  
Polythene Bags  
Red Chilli  
Mixer

#### 48. POPCORN

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments

Popcorn  
Popping Machine  
Sealing Machine

#### 49. SUPARI CHIPS

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Supari Chips  
Supari-Chips Cutting Machine  
Balance

#### 50. REVADI AND GAZAK

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Revadi and Gazak  
Big Pans  
Utensils

#### 51. MAVA

Raw Material  
Manufacturing Process  
Main Machinery and Equipments  
Milk  
Mava Making Machine  
Milk Cans  
Physical Balance

#### 52. TOMATO SAUCE AND KETCHUP

Raw Materials  
Manufacturing Process  
Main Machinery and Equipments  
Tomato Sauce  
Tomato  
Tomato Charging Machine  
Boiler Machine

## 53. ICE CREAM

Raw Materials

Manufacturing Process

Main Machinery and Equipments

Ice Cream

Mixer

Ice Cream Chiller

## 54. BAKING POWDER

Raw Materials

Manufacturing Process

Main Machinery and Equipments

Baking Powder Ribbon Blender Sieving Set

## 55. MOONG DAL BARI

Raw Materials

Manufacturing Process

Main Machinery and Equipments

Moong Dal

Moong Dal Bari

Utensils

Mixer

## 56. PACKAGED DRINKING WATER WITH PET BOTTLES

Weight Loss

Maintain Bone Health

Lower Blood Pressure and LDL Cholesterol

Reduce Chances of Kidney Stone

Process of Manufacture

## 57. FOOD PACKAGING & LABELLING

Importance of Packaging

Promotion

Facilitates Purchase Decision

Differentiation

Protection/ Preservation

Chemical Protection  
Biological Protection  
Different Types of Food Packaging  
Custom Display  
Plastic  
Aluminum  
Cardboard  
Other Types of Packaging  
Food Labeling  
Purpose  
Types of Labeling in Marketing  
Branded Product Labels  
Eco or Information Labels Other Product Label Types

## 58. GOOD MANUFACTURING PRACTICES IN FOOD INDUSTRY

Food Industry Standards  
GMP Practices for Food  
(i) Design and Facilities  
Location  
(ii) Premises and Rooms  
Design and Layout  
(iii) Internal Structures & Fittings  
(iv) Equipment  
(v) Containers for Waste and Inedible Substances  
Facilities  
(i) Water Supply  
(ii) Drainage and Waste Disposal  
(iii) Cleaning  
(iv) Personnel Hygiene Facilities and Toilets  
(v) Temperature Control  
(vi) Air Quality and Ventilation  
(vii) Lighting  
(viii) Power Back up  
(ix) Storage  
Control of Operation  
(i) Time and Temperature Control  
(ii) Control of Other Specific Process Steps  
(iii) Specifications  
Microbiological Cross Contamination  
Physical and Chemical Contamination

Incoming Materials Requirements  
Packaging  
Water  
(i) Water, Ice and Steam in Contact with Food  
(ii) Water, Ice and Steam not in Contact with Food  
(iii) Water pipes & Storage Tanks  
(iv) Management and Supervision  
Documentation and Records  
Product Recall & Traceability  
Storage  
Maintenance and Sanitation  
(i) Pest Control  
(ii) Waste Management  
(iii) Personal Hygiene  
Quality Control  
Transportation  
Product Information and Consumer Awareness  
Competence & Training  
Temporary/Mobile Premises, Vending Machines

## 59. PHOTOGRAPHS OF MACHINERY WITH SUPPLIERS CONTACT DETAILS

Washing and Peeling Machine  
Paste Making Machine  
Slicer Machine  
Paste Filling Machine  
Steam Jacketted Vessel  
Ribbon Blendor  
Pulverizer  
Bucket Elevator  
Powder Dryer Machine  
Boiler  
Oil Storage Tank  
Pneumatic Conveying System  
Material Handling Conveyors  
Air Compressor  
R.O. Plant  
Distillation Unit  
Fruit Pulper  
Liquid Filling Machine  
Drum Type Blancher

Fruit Mill  
Spray Machine  
Weighing Machine  
Packaging Machine  
Oil Extraction Machine  
Pollution Control Equipment  
Reverse Osmosis System  
Pump  
Hammer Mill  
Redler Conveyors  
Oil Filter Machine  
Blending Tanks  
Sealing Machine  
Carton Packaging Machine  
Pouch Packaging Machine

## 60. SAMPLE PLANT LAYOUTS

### **About Niir**

NIIR Project Consultancy Services (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. Its various services are: Pre-feasibility study, New Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Preparation of Project Profiles and Pre-Investment and Pre-Feasibility Studies, Market Surveys and Studies, Preparation of Techno-Economic Feasibility Reports, Identification and Selection of Plant and Machinery, Manufacturing Process and/or Equipment required, General Guidance, Technical and Commercial Counseling for setting up new industrial projects and industry. NPCS also publishes various technology books, directories, databases, detailed project reports, market survey reports on various industries and profit making business. Besides being used by manufacturers, industrialists, and entrepreneurs, our publications are also used by Indian and overseas professionals including project engineers, information services bureaus, consultants and consultancy firms as one of the inputs in their research.