

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

**Author:-** NPCS Board of Food Technologists

**Format:** paperback

**Code:** NI316

**Pages:** 392

**Price:** Rs.0US\$ 0

**Publisher:** NIIR PROJECT CONSULTANCY SERVICES

Usually ships within **5** days

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.

## 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 Blender  
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. NPCS is manned by engineers, planners, specialists, financial experts, economic analysts and design specialists with extensive experience in the related industries.

Our various services are: Detailed Project Report, Business Plan for Manufacturing Plant, Start-up Ideas, Business Ideas for Entrepreneurs, Start up Business Opportunities, entrepreneurship projects, Successful Business Plan, Industry Trends, Market Research, Manufacturing Process,

Machinery, Raw Materials, project report, Cost and Revenue, Pre-feasibility study for Profitable Manufacturing Business, Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Business Opportunities, Investment Opportunities for Most Profitable Business in India, Manufacturing Business Ideas, Preparation of Project Profile, Pre-Investment and Pre-Feasibility Study, Market Research Study, Preparation of Techno-Economic Feasibility Report, Identification and Section of Plant, Process, Equipment, General Guidance, Startup Help, Technical and Commercial Counseling for setting up new industrial project and Most Profitable Small Scale Business.

NPCS also publishes various process technology, technical, reference, self employment and startup books, directory, business and industry database, bankable detailed project report, market research report on various industries, small scale industry and profit making business. Besides being used by manufacturers, industrialists and entrepreneurs, our publications are also used by professionals including project engineers, information services bureau, consultants and project consultancy firms as one of the input in their research.

Our Detailed Project report aims at providing all the critical data required by any entrepreneur vying to venture into Project. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line.

---

**NIIR PROJECT CONSULTANCY SERVICES**, 106-E, Kamla Nagar, New Delhi-110007, India.  
**Email:** [npcs.india@gmail.com](mailto:npcs.india@gmail.com) **Website:** [NIIR.org](http://NIIR.org)

Tue, 01 Jul 2025 14:16:25 +0000