

# **Food Processing, Food Industry, Agriculture, Agro Processing, Processed Food, Cereal Food, Fruits, Vegetables, Bakery, Confectionery, Milk, Dairy, Meat, Fisheries, Spices Oils, Fats, Coconut, Tea and Tobacco Based Products**

## **Modern Technology of Agro Processing & Agricultural Waste Products**

**Author:** NIIR Board

**Format:** Paperback

**Book Code:** NI11

**Pages:** 504

**ISBN:** 8186623493

**Price:** Rs. 975.00    **US\$** 25.95

Agriculture being a foundation stone for most budding economies, it would be benefiting to know about agro processing and waste management of agriculture produce. The book will act as an encyclopaedia for enriched information on the processing of a variety of products manufactured from agro crops and the waste management of agriculture products. Agro processing can be defined as set of techno economic activities carried out for preservation and treatment of agricultural produce and to make it useful as food, feed, fibre, fuel or manufacturing objects . Therefore, the span of the agro-processing industry covers all operations from the phase of harvest to the phase where the material reaches the end users in the desired form, packaging, quantity, quality and price. Agro processing is a complex process and a clear understanding will certainly help to grow your business. The agro processing is functional to all the produces, originating from agricultural farm, livestock, aqua cultural sources and forests for their preservation, treatment and value-addition to make them serviceable as food, feed, fibre, fuel or industrial raw materials. The book deals with varied information on the agro product like Quality Parameters of Dehydrated Fruits and Vegetables, Fruit Specific Preservation Technologies, General Properties of Fruits and Vegetables; Chemical Composition and Nutritional Aspects; Structural Features. Some chapters provide information on the various by products of agro products like Alcohol from Potatoes, Activated Carbon from Saw Dust, Rice Husk and Coconut Shells, Cattle Feed from Molasses, Bio coal Briquettes from Agriculture Cellulosic Waste, Maize Processing for Glucose etc. The book also gives a touch to the growth of agro processing Industries in India that has experienced expansion during last 5 decades, starting with a handful of facilities to the present level. The book in addition contains the number of products made from agricultural waste. With the current expansion and growth of agro processing and the waste management the book will render you comprehensive information on the project profiles, requirements of basic infrastructure like plant, machinery and raw materials and the addresses of their suppliers. Agro processing has recently emerged as the dawn sector of the Indian economy with its enormous prospective for growth and direct assistance to economic aspect especially on

employment and income generation. A number of estimates propose that in developed countries, up to 14 per cent of the total labour force is engaged in agro-processing sector directly or indirectly. Though, in India, a meagre number of 3 per cent of the work force finds employment in this sector revealing its underdeveloped state and vast untapped potential for employment. The book will provide you comprehensive information to tap the opportunities available in the sector.



**Author:** P.K. Tripathi

**Format:** Hardcover

**Book Code:** NI12

**Pages:** 221

**ISBN:** 9788195676934

**Price:** Rs. 1,775.00 US\$ 45.00

Handbook on Agro Based Industries (Garlic Oil and Powder, Biomass Briquettes from Bio Waste, Moringa Oleifera (Drumstick) Powder, Dehydrated Onion, Aloe Vera Gel and Powder, Cashew Nut Shell Oil and Cardanol, Rice Powder, Puttu and Wheat Powder, Fructose Syrup from Broken Rice, Potato Powder, Granules and Pellets, Rice Flakes and Puffed Rice, Cashew Nut Processing Unit, Banana, Onion, Orange and Tomato Powder & Disposable Plate and Cups from Waste Rice Husk Powder) The term "agro" refers to agriculture, which is the cultivation of crops and the rearing of animals for various purposes. The agro-based industry, "agro" encompasses all the activities related to farming, including growing crops, raising livestock, and harvesting natural resources. Agro is the foundation of the agro-based industry, as it involves the production of raw materials and agricultural products that are essential for various sectors. This includes crops such as grains, fruits, vegetables, and oilseeds, as well as livestock such as cattle, poultry, and fish. Agro-based industries use these agricultural products as raw materials for further processing and manufacturing. For example, crops can be processed into food products such as flour, oil, and beverages, while livestock can be processed into meat, dairy products, and leather. In addition to food and beverages, the agro based industry also includes sectors such as biofuels, forestry, and fisheries. Biofuels are derived from agricultural crops and are used as an alternative to traditional fossil fuels. Forestry involves the sustainable management of forests and the production of wood products. Fisheries focus on the breeding and harvesting of fish and other aquatic organisms. Agro is the backbone of the agro-based industry, providing the necessary raw materials and resources for various sectors. It is an integral part of our economy and plays a vital role in meeting the growing demand for food, fuel, and fiber products. India is one of the largest producers of food, and is the second largest producer of rice, wheat, fruits, and vegetables in the world. Nearly 70% of the population depends on agriculture and agro-based industries. Since it would cause diversification and commercialization of agriculture, it will thus enhance the incomes of farmers and create food surpluses. It is a well-recognized fact across the world, particularly in the context of industrial development that the importance of agro industries is relative to agriculture increases as economies

develop. It should be emphasized that food is not just produce. Food also encompasses a wide variety of processed products. It is in this sense that the agro-industry is an important and vital part of the manufacturing sector in developing countries and the means for building industrial capacities. The development of agro-based industries commenced during pre-independence days. Cotton mills, sugar mills, jute mills were fostered in the corporate sector. The major contents of the book are production of Garlic Oil and Powder, Biomass Briquettes from Bio Waste, Moringa Oleifera (Drumstick) Powder, Dehydrated Onion, Aloe Vera Gel and Powder, Cashew Nut Shell Oil and Cardanol, Rice Powder, Puttu and Wheat Powder, Fructose Syrup from Broken Rice, Potato Powder, Granules and Pellets, Rice Flakes and Puffed Rice, Cashew Nut Processing Unit, Banana, Onion, Orange and Tomato Powder, Disposable Plate and Cups from Waste Rice Husk Powder with Manufacturing Process, Project Profiles (with cost estimation) and process flow diagrams. This book is also a fantastic resource for people interested in or who have worked in the Agro Based industry. Profitable and viable business opportunities exist in the Agro sector. As a result, creating your own business is a good way to get into it. To learn more about Agro based industry in depth, read this book. It will assist you in figuring out how to establish your own Agro Business. Because of the increasing demand for Agro based Products in today's market, it's a terrific method to earn money.



**Author:** P.K. Tripathi

**Format:** Hardcover

**Book Code:** NI14

**Pages:** 227

**ISBN:** 9788195577583

**Price:** Rs. 2,295.00 US\$ 200.00

Manufacture of Food & Beverages with Project Profiles (Food Processing, Beverages, Potato Powder, Herbal Health Drink, Carbonated Health Drinks, Chocolate, Candy, Toffee, Microbrewery, Functional Food Based Bakery Products (Modern Bakery Unit), Rice Beer, Craft Beer, Lemon-Lime Flavoured Soft Drink (Nimbu Pani) and Fruit Juice (Apple, Plum and Peach)) The Food and Beverage industry in India has been growing at a fast pace, with an annual growth rate of 10%. The food and beverage industry is an essential sector of any nation's economy, since it offers basic needs for survival. The industry provides employment to thousands of people across all levels; from suppliers to people in distribution, manufacturing, sales and marketing. Every country has its own market dynamics that contribute to a specific food culture as well as its own specialty products. In general terms, there are two ways: one method involves processing raw materials into packaged foods which can be sold at supermarkets or grocery stores; another method involves cooking meals or drinks at restaurants or bars. Some companies focus on only one aspect of production while others handle both aspects. Regardless of what method is used, it's important to keep in mind that these products need to be transported from their place of origin (i.e., farms) all over a country and eventually reach consumers' homes. This process is called distribution. Distribution channels vary greatly by region but usually include wholesale suppliers, retailers (grocery stores), wholesalers and local distributors who sell directly to customers through restaurants or small shops. The industry also includes packaging manufacturers, advertising agencies and event planners for food festivals like Taste of Chicago. The money-making opportunities are very huge because most Indians eat three times a day. Snacks have become an important part of our daily life, some people have them at breakfast while others prefer to have their favourite snack during lunch or dinner time. Some of these companies provide all kinds of food products like readymade meals, vegetables, fruits, bakery products etc. There are various kinds of snacks available for various tastes like salty snacks for those who love salty foods; sweet ones for those who love sweets; spicy ones for those who love spicy foods; crunchy ones for those who love crunchy foods; soft drinks for children and adults alike; fruit juices which can be prepared from fresh fruits or by



adding water to powder concentrates. These companies also supply dairy products like milk, cheese, butter, paneer (cottage cheese), curd (yoghurt) etc. These days many fast food chains are coming up in big cities where you can get your favourite fast food on your doorstep within minutes after placing your order over phone or internet. Many of these companies sell frozen foods too. Frozen food items include ice creams, kulfi (Indian ice cream), rasgullas (sweet dumplings made with cottage cheese), samosas, vadas etc. In addition to that there are large number of beverage companies which make carbonated and non-carbonated drinks like aerated water, juice drinks, squashes, lemonades etc. For example Coca Cola has more than 200 brands worldwide including Thums Up in India; Pepsi has Slice and Mirinda in India; Cadbury Schweppes sells Fanta and Sprite in India. All these beverage companies manufacture carbonated as well as non-carbonated drinks but they do not manufacture any alcoholic beverages. The market is grow at a CAGR of 9.5%. The rise in CAGR is attributable to this market's demand and growth returning to pre-pandemic levels and even exceeding once the pandemic is over. Functional foods and beverages are enriched with functional nutrients, in addition to the basic nutritional value of the product, to provide multiple health-related benefits. These nutrients include amino acids, vitamins, minerals, proteins, fatty acids, and prebiotics. Functional products have gained importance in recent years due to the increased awareness among consumers. Rising Spending on Healthy & Nutritious Diet Products to Fuel Market Growth The functional food and beverage market trends are driven by the rising demand for healthy and nutrition-rich diets. Evolving lifestyles and increasing incomes of consumers across the world have fueled the demand for products with superior nutritional profiles. Functional beverages, for instance, are designed to be consumed on-the-go, providing enhanced nutrition. Increasing product development and innovation activities, the availability of a wide variety of products, especially across e-commerce platforms, and the adoption of unique promotional strategies by market players are collectively furthering the growth of this market. The market segments for functional foods and drinks, based on type, include functional dairy products as the leading product type. Increased consumer inclination towards aiding digestive health has contributed to raising the demand for prebiotics and probiotics dairy products. The higher affordability of functional dairy products such as yogurt is further boosting its demand across developing economies where per capita income and spending on health food products are comparatively lower. The cereal and grain

segment is another important segment that is generating the highest revenue after functional dairy products. The fortification of cereals & grains is one of the most effective methods to tackle nutrient deficiencies. Governments and regulatory authorities across the world have been taking initiatives to address the growing concern of nutrient deficiencies among populations with fortified foods. The addition of iodine in salt, vitamin D in milk, and vitamin B and iron in flour and bread are some of the examples of food fortification. The book covers a wide range of topics connected to Food Industry, Potato Powder, Herbal Health Drink, Carbonated Health Drinks, Chocolate, Candy And Toffee, Microbrewery, Functional Food Based Bakery Products (Modern Bakery Unit), Rice Beer With Can & Bottle Packaging, Craft Beer, Lemon-Lime Flavoured Soft Drink (Nimbu Pani), Fruit Juice (Apple, Plum And Peach), as well as their manufacturing processes and plant economics. A thorough guide on Food and Beverage manufacture and entrepreneurship. This book is a one-stop shop for everything you need to know about the Food and Beverage Industry, which is ripe with opportunity for producers, merchants, and entrepreneurs. This is the only book that covers the process of making commercial Food and Beverage. From concept through equipment procurement, it is a veritable feast of how-to information.

# Profitable Agro Based Projects with Project Profiles (Cereal Food Technology) (2nd Revised Edition)

**Author:** P.K.Chattopadhyay

**Format:** Hardcover

**Book Code:** NI15

**Pages:** 216

**ISBN:** 9789381039168

**Price: Rs. 1,895.00 US\$ 50.95**

\*\*\*\*\*Limited Edition- available in Photostat Version

Only\*\*\*\*\* Cereal, also called grain, any grass yielding starchy seeds suitable for food. The cereals most commonly cultivated are wheat, rice, rye, oats, barley, corn (maize), and sorghum. As human food, cereals are usually marketed in their raw grain form (some are frozen or canned) or as ingredients of various food products; as animal feed, they are consumed mainly by livestock and poultry, which are eventually rendered as meat, dairy, and poultry products for human consumption; and they are used industrially in the production of a wide range of substances, such as glucose, adhesives, oils, and alcohols. Real processing, treatment of cereals and other plants is to prepare their starch for human food, animal feed, or industrial use. Cereals are used for both human and animal food and as an industrial raw material. Although milled white flour is largely used for bread production, especially in industrialized countries, the grain may be converted to food in other ways. The relatively minor use of cereals in nonfood products includes the cellulose in the straw of cereals by the paper industry, flour for manufacturing sticking pastes and industrial alcohol, and wheat gluten for core binders in the casting of metal. Rice chaff is often used as fuel in Asia. Assuming a 50 percent increase in fertilizer use and that 41.5 percent of the cropped area is irrigated; projected 2020 food production would increase by 7.2 percent - from 251.0 million tons to 269.1 million tons. Future increases in the production of cereals and non-cereal agricultural commodities will have to be essentially achieved through increases in productivity, as the possibilities of expansion of area and livestock population are minimal. To meet the projected demand in the year 2020, country must attain a per hectare yield of 2.7 tons for rice, 3.1 tons for wheat, 2.1 tons for maize, 1.3 tons for coarse cereals, 2.4 tons for cereal, 1.3 tons for pulses, 22.3 tons for potato, 25.7 for vegetables, and 24.1 tons for fruits. The content of the book includes information about cereal food technology. The major contents of this book are project profiles of projects like rice milling, rice products, rice flake (poha) and utilities of storage and preservation techniques of food grains, flour milling, wheat and flour products, maize processing, the dry milling of corn, rice starch, corn products, white oat processing, nutrition labeling, requirements of plant and machinery and address of plant and machinery suppliers. This book is very useful for new

entrepreneurs, technical institutions, existing units and technocrats.

# Handbook on Fruits, Vegetables & Food Processing with Canning & Preservation (3rd Edition)

**Author:** NPCS Board

**Format:** Paperback

**Book Code:** NI19

**Pages:** 688

**ISBN:** 9788178330839

**Price:** Rs. 1,475.00 US\$ 39.86

Natural foods such as fruits and vegetables are among the most important foods of mankind as they are not only nutritive but are also indispensable for the maintenance of the health. India is the second largest producer of fruits and vegetables in the world. Fertile soils, a dry climate, clean water and abundant sunlight help the hard working farmers to produce a bountiful harvest. Although there are many similarities between fruits and vegetables, there is one important difference that affects the way that these two types of crop are processed like fruits are more acidic than vegetables. Food processing is the set of methods and techniques used to transform raw ingredients into food or to transform food into other forms for consumption. Food processing typically takes clean, harvested crops or butchered animal products and uses these to produce attractive, marketable and often long shelf-life food products. Canning is a method of preserving food in which the food is processed and sealed in an airtight container. Food preservation is the process of treating and handling food to stop or greatly slow down spoilage (loss of quality, edibility or nutritive value) caused or accelerated by micro organisms. One of the oldest methods of food preservation is by drying, which reduces water activity sufficiently to prevent or delay bacterial growth. Drying also reduces weight, making food more portable. Freezing is also one of the most commonly used processes commercially and domestically for preserving a very wide range of food including prepared food stuffs which would not have required freezing in their unprepared state. Fruits and vegetable processing in India is almost equally divided between the organized and unorganized sector, with the organized sector holding 48% of the share. The present book covers the processing techniques of various types of fruits, vegetables and other food products. This book also contains photographs of equipments and machineries used in fruits, vegetables and food processing along with canning and preservation. This book is an invaluable resource for new entrepreneurs, food technologists, industrialists etc.

## Handbook on Spices

**Author:** NIIR Board

**Format:** Paperback

**Book Code:** NI20

**Pages:** 416

**ISBN:** 8178330946

**Price:** Rs. 975.00    **US\$** 25.95

Ever since the commencement of civilization India has been the world's most preferred destination of spices. The variety and nature of spices available in India makes the country to stand out of the crowd in the international arena. Undoubtedly the country is one of the leading producers and exporters of spices in the world. Getting proper information on this sector of the economy is sure to benefit many budding entrepreneurs. Featured as one of the best sellers the Handbook on Spices is a book for all those thinking of penetrating into the sector and will act as an additional sources of information that are in this line of trade. The book has covered more than 55 spices produced in the country some of which are Black Pepper, Cardamoms, Ginger, Turmeric, Chillies, Vanilla, Tamarind, Coriander, Cumin seeds, Fenugreek, Dill, Garlic, and Onion etc. Along with the list of spices it also provides information on climatic conditions and soil type required for these spices, the planting requirements, the storage condition, composition, uses, the botanical aspect and the varieties of the product available. The chapter on spices will also provide you information about the Diseases and Pests from which the spices have to be protected, wherever required the basis of grading of the spice is also mentioned. The chapters also deal in the quality improvement in Spices by the Solar Drying, Quality Standards for Ajowan Seed and its Powder, Value added Exportable Products from Spice. The spices demand have increased a lot in the world on account of fact that there has been increasing inhabitation of Indian community in developed countries and recently developed taste for Indian delicacies in the international forum. With different climates in different parts of country, India has the potential to produce a variety of spices. Thus the spice market is having a lot of future prospects. This book inculcates the wide-range of information on cultivation and processing of main spices and condiments of India which have been playing imperative role in the development and growth of national economies of several spices producing, importing and exporting countries. This book will be helpful for new entrepreneurs, spice growers, technologists and those who are already in the spice production and are looking to expand further in the present line.



# The Complete Technology Book on Snack Foods (2nd Revised Edition)

**Author:** Dr. Himadri. Panda

**Format:** Paperback

**Book Code:** NI57

**Pages:** 544

**ISBN:** 9789381039243

**Price:** Rs. 1,475.00    **US\$** 39.86

Snacking is becoming a way of life with many people. In some countries the average eating frequency is around 6 to 7 occasions per day. There are plenty of marketing niches and slots to be filled in the Snack food areas. Snack is a type of food not normally eaten as a main meal such as breakfast, lunch or dinner but to mitigate hunger between these meals. Snack may also be consumed between meals purely for the enjoyment of its taste. Traditionally snacks were prepared from leftovers or ingredients easily available at home and included sandwiches, nuts, fruits etc. They have become more appealing than prepared foods and contain tempting, flavourful ingredients. This book attempts to provide the processes for the manufacture of various Snack food items which has tremendous domestic and export market. It covers a variety of subjects from snack food emphasizing the evolving nature of snacks in our diet. Whether you are new to the field or you are pro facing broader responsibilities, Snack Food Processing provides valuable information gained through first-hand experience. It provides a clear, comprehensive overview of the Snack Food Processing which contains definitive content on developing, preparing, and processing various types of snack foods. The initial content is regarding snack food ingredients and the work progresses to discuss various types of snacks with processes in subsequent chapters, detailing their development, production and consumption, raw material requirement and flow chart. Detailed discussion on technical functions that includes product development followed by quality control and nutritional supplementation has also been included. Some chapter covers packaging, extrusion and other technologies of snack food manufacturing process. Special content on machinery equipment photographs along with supplier details has also been included. It is for people who want a technical based practical review on how snack foods are made. We hope that this book will meet every individual need who has thrust to explore technology on snack food processing. New entrants into the field will be able to confidently communicate with suppliers and associates. Managers and quality control personnel will gain a better idea on where to start in solving problems when they arise.

**The Complete Technology Book on Bakery Products Baking Science with Formulation & Production (Biscuit, Bagel, Bread, Gluten-Free Bread, Rusk, Cookie, Cracker, Pie Crusts, Cakes with Production Process, Machinery, Equipment Details and Factory Layout)**

**Author:** NIIR Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI61

**Pages:** 488

**ISBN:** 9788193733974

**Price:** Rs. 1,875.00 US\$ 61.00

The Complete Technology Book on Bakery Products Baking Science with Formulation & Production (Biscuit, Bagel, Bread, Gluten-Free Bread, Rusk, Cookie, Cracker, Pie Crusts, Cakes with Production Process, Machinery, Equipment Details and Factory Layout) 5th edition Bakery products refer to a wide range of baked goods that are typically made using flour as the main ingredient. These delicious treats come in various forms, such as cakes, cupcakes, bread, pastries, cookies, and more. They are usually made by combining flour with other ingredients such as sugar, butter, eggs, and flavorings, which are then baked to perfection. Bakery products have a universal appeal and are enjoyed by people of all ages and cultures. They are a staple in many households, providing a sweet and indulgent treat for special occasions or everyday enjoyment. The diversity of bakery products is vast, ranging from delicate pastries filled with creamy custard to crusty loaves of bread that make the perfect sandwich. The global bakery products market size to be valued at USD 251.1 billion, expanding at a compound annual growth rate (CAGR) of 3.2%. Increasing consumption of ready-to-eat foods across the globe owing to hectic lifestyle is expected to fuel the product demand over the coming years. Growing preference for ethnic food along with the success of Thai and Mexican food in restaurants has resulted in increased demand for bakery products in Europe. The bakery industry has been experiencing significant growth and success in recent years. There are several reasons behind this booming industry. There has been a rise in consumer demand for healthier and high-quality baked goods. With the growing focus on wellness and clean eating, bakeries are now offering a variety of options that cater to different dietary needs, including gluten-free Bread. This book consists of in-depth details about Bakery Products, Biscuit, Bagel, Bread, Gluten-Free Bread, Rusk, Cookie, Cracker, Pie Crusts, Cakes, Cupcakes, Doughnuts, Buns, Pizzas, and Icings with Production Process, Equipment Tools Information and also Factory Layouts. Profitable and viable business opportunities exist in the Bakery products sector. As a result, creating your own business is a good way to get into it. To learn more about Bakery products industry in depth, read this book. It will assist you in figuring out how to establish your own Bakery Business. Because of the increasing demand for Bakery

products in today's market, it's a terrific method to earn money.

# **The Complete Technology Book on Processing, Dehydration, Canning, Preservation of Fruits & Vegetables (Processed Food Industries)4th Revised Edition**

**Author:** NIIR Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI65

**Pages:** 608

**ISBN:** 9788193733929

**Price:** Rs. 1,995.00    **US\$** 52.95

Fruits and vegetables are processed into a variety of products such as juices and concentrates, pulp, canned and dehydrated products, jams and jellies, pickles and chutneys etc. The extent of processing of fruits and vegetables varies from one country to another. The technology for preservation also varies with type of products and targeted market. Owing to the perishable nature of the fresh produce, international trade in vegetables is mostly confined to the processed forms. India is the second largest producer of fruits & vegetables in the world with an annual production of million tonnes. It accounts for about 15 per cent of the world's production of vegetables. Due to the short shelf life of these crops, as much as 30-35% of fruits and vegetables perish during harvest, storage, grading, transport, packaging and distribution. Hence, there is a need for processing technology of fruits and vegetables to cater the domestic demand. The major contents of the book are procedures for fruit and vegetable preservation, chemical preservation of foods, food preservation by fermentation, preservation by drying, canning fruits, syrups and brines for canning, fruit beverages, fermented beverages, jams, jellies and marmalades, tomato products, chutneys, sauces and pickles, vegetables preparation for processing, vegetable juices, sauces and soups, vegetable dehydration, freezing of vegetables etc. The book also contains sample plant layout and photographs of machinery with supplier's contact details. A total guide to manufacturing and entrepreneurial success in one of today's most food processing industry. This book is one-stop guide to one of the fastest growing sectors of the food processing industry, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only complete handbook on the commercial production of food processing products. It serves up a feast of how-to information, from concept to purchasing equipment.

# **Modern Technology Of Oils, Fats & Its Derivatives (2nd Revised Edition)**

**Author:** NIIR Board

**Format:** Paperback

**Book Code:** NI68

**Pages:** 576

**ISBN:** 9788178330853

**Price:** Rs. 1,875.00 US\$ 50.67

Until recently fats and oils have been in surplus, and considered a relatively low value byproduct. Only recently have energy uses of fats and oils begun to be economically viable. Food value of fats and oils is still far above the energy value of fats and oils. Industrial and technical value of fats and oils is still above the energy value of fats and oils. Animal feeds value of fats and oils tends to remain below the energy value of fats and oils. With development of new technology oils and fats industry has undergone a number of changes and challenges that have prompted the development of new technologies, and processing techniques. Oils and fats constitute one of the major classes of food products. In fact oils and fats are almost omnipresent in food processing – whether naturally occurring in foods or added as ingredients for functional benefits and, despite the impression given by several sources to the contrary; they remain an essential part of the human diet. However, it is increasingly apparent that both the quantity and the quality of the fat consumed are vital to achieve a balanced diet. They are essential constituents of all forms of plant and animal life. Oils and fats occur naturally in many of our foods, such as dairy products, meats, poultry, and vegetable oil seeds. India is the biggest supplier of greater variety of vegetable oil and still the resources are abundant. The applications of oils are also seen in paints, varnishes and related products. Since the use of oils and fats in our daily life is very noticeable the market demands of these products are splendid. Special efforts has been made to include all the valuable information about the oils, fats and its derivatives which integrates all aspects of food oils and fats from chemistry to food processing to nutrition. The book includes sources, utilization and classification of oil and fats followed by the next chapter that contain details in physical properties of fat and fatty acids. Exquisite reactions of fat and fatty acids are also included in the later chapter. It also focuses majorly in fractionation of fat and fatty acids, solidification, homogenization and emulsification, extraction of fats and oils from the various sources, detail application in paints, varnishes, and related products is also included. It also provides accessible, concentrated information on the composition, properties, and uses of the oils derived as the major product followed by modifications of these oils that are commercially available by means of refining, bleaching and



deodorization unit with detailed manufacturing process, flow diagram and other related information of important oils, fats and their derivatives. Special content on machinery equipment photographs along with supplier details has also been included. We hope that this book turns out to be considerate to all the entrepreneurs, technocrats, food technologists and others linked with this industry.

# The Complete Technology Book on Starch and Its Derivatives

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI81

**Pages:** 540

**ISBN:** 8178330733

**Price:** Rs. 1,100.00    **US\$** 29.73

Starch is a group of poly saccharides, composed of glucopyranose units joined together by glucosidric linkages. Starch is also metabolized for energy in plants and animals, and is used to produce a large number of industrial products. Starch is processed to produce many of the sugars in processed foods. The biggest industrial non food use of starch is as adhesive in the paper making process. Other important fields of starch application are textiles, cosmetic and pharmaceutical uses. Starch can be obtained from maize, sorghum, roots and tubers such as tapioca, arrow root, potatoes etc. Starch truly serves as a multifunctional ingredient in the food industry. Starch is one of the most present biomaterials has witnessed significant developments over the years. By products are obtained in the manufacture of different types of starch such as maize gluten has a number of interesting possible uses in industry, zein (by product of corn processing) is used in the preparation of stable glass like plastics, modification of zein is used as adhesives and in the preparation of coating compositions for paper, the most important by product from wheat starch manufacture is gluten which is used in preparing diabetic foods, for feeding cattle, thickening agent in textile printing and so on. The Global starch market is likely to get respite from deceleration in its market growth, with growth poised to receive a new lease of life in the next few years. This book basically illustrates about the properties, structures, manufacturing process explained with flowcharts and diagrams, applications of starch and its derivatives etc. The major contents of the book are structure and chemical properties of starch, chemical composition, molecular structure, starch granule properties, water sorption and granule swelling as a function of relative humidity, factors affecting starch paste properties, the oxidation of starch etc. This is a unique book, concise, up to date resource offering a valuable presentation of the subject. This book contains processes of starch and its derivatives. This book is an invaluable resource for new entrepreneurs, industrialists, consultants, libraries.

## Modern Technology on Food Preservation (2nd Edition)

**Author:** NPCS Board

**Format:** Paperback

**Book Code:** NI88

**Pages:** 528

**ISBN:** 9788178330716

**Price:** Rs. 1,275.00    **US\$** 33.95

Food Preservation has become an integral part of the food processing industry. There are various methods of food preservation; drying, canning, freezing, food processing etc. Food processing is one the method of food preservation which is the set of methods and techniques used to transform raw ingredients into food or to transform food into other forms for consumption by humans or animals either in the home or by the food processing industry. Canning is one of the various methods of food preservation in which the food is processed and then sealed in an airtight container. This process prevents microorganisms from entering and proliferating inside. Dehydration is the process of removing water or moisture from a food product. Food dehydration is safe because water is removed from the food. Freezing is also one of the most commonly used processes commercially and domestically for preserving a very wide range of food including prepared food stuffs which would not have required freezing in their unprepared state. Benefits of food processing include toxin removal, preservation, easing marketing and distribution tasks, and increasing food consistency. In addition, it increases seasonal availability of many foods, enables transportation of delicate perishable foods across long distances and makes many kinds of foods safe to eat by deactivating spoilage and pathogenic micro organisms. Nanotechnology exhibits great potential for the food industry. New methods for processing nanostructures are being developed having novel properties that were not previously possible. As such, due to the recent up gradation of preservation techniques, the preservation industry is also growing almost at the same rate as the food industry which is about 10 to 12% per year. The purpose of this book is to present the elements of the technology of food preservation. It deals with the products prepared from various fruits and vegetables commercially. Relevant information on enzymes, colours, additives, flavours, adulteration, etc., has been given. This book also contains photographs of equipments and machineries used in food preservation. This book will be very useful for new entrepreneurs, food technologists, industrialists, libraries etc.



**Author:** NIIR Board of Consultants Engineers

**Format:** Paperback

**Book Code:** NI93

**Pages:** 528

**ISBN:** 9788193733981

**Price: Rs. 1,895.00 US\$ 50.95**

Food Packaging Technology Handbook (3rd Revised Edition)  
(Biodegradable Films, Materials , Polymers, Aseptic

Packaging, Labels and Labelling, Packaging of Cashew Nuts,  
Dairy Products, Milk, Fish, Meat, Shrimps, Canning of  
Vegetables, Fruits with details of Machinery and Equipments)

Food packaging technology is primarily concerned with packaging activities regarding protection of food products from biological, physical or chemical agents. With the growth of modern civilization, people are getting more concerned with hygiene and quality of the food. The packaging industry's growth has led to greater specialization and sophistication from the point of view of health and environment friendliness of packing material. The demand on the packaging industry is challenging, given the increasing environmental awareness among communities. The food packaging industry is growing at the rate of 22 to 25 per cent per annum. In near future it is going to be a booming industry. Packaging has played a critical role as a differentiator in promoting brands, especially for packaged food products. With the increase in urbanization and emergence of supermarkets and hypermarkets, differentiating food products through the aesthetic appeal of packaging has become important for food manufacturers. Furthermore, consumers are increasingly paying more attention to the ingredients and contents of the package. This provides an opportunity for the food packaging technology & equipment manufacturers as food manufacturers need to differentiate their products by conveying the benefits of packaging technology on the labels and packets, such as shelf life, the time required for preparing the food, and nutritional contents to the consumers. Biodegradable packaging is produced using biopolymers, which are molecules often found in living organisms, like cellulose and proteins. This means they can be safely consumed, degrade quickly, and often be created from waste plant products. The main applications of bio-based and biodegradable plastics are currently in (food) packaging, food service ware, (shopping) bags, fibres/nonwovens and agricultural applications. Bio-based drop-in plastics such as bio-PE and bio-PET are identical to fossil-based counterparts and can be used in exactly the same applications. The more recently developed bio-based plastics (bio-PE and bio-PET) are also mainly used in food packaging. The increasing awareness of the

environmental impact of packaging products and a willingness to replace packaging materials by alternatives with e.g. a lower carbon footprint or made from renewable resources are the main driver for development and the use of these materials. This book gives comprehensive account of food packaging, which is the most important part to preserve the food for a long time. The present volume has been written primarily for the benefit of new entrepreneurs, technologists, technical libraries and for those who want to diversify in the field of food industry.

## Herbal Foods and its Medicinal Values

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI96

**Pages:** 768

**ISBN:** 8186623744

**Price:** Rs. 1,275.00    **US\$** 33.95

Food has been a basic part of our existence. Through the centuries we have acquired a wealth of information about the use of food as a part of our community, social, national and religious life. It has been used as an expression of love, friendship and social acceptance without knowing the medicinal values of such food. India is one of the leading herbal food producer and exporter in the world. Traditional use of herbal medicines is recognized as a way to learn about potential future medicines. Several meticulous researches were conducted and experimented with herbal food. They arrived at more precise conclusions about the usefulness of diverse plants and herbs that are utilized in field like medicine. Now a day people are very much aware of the ingredients in synthetic drugs, the benefits of herbal products and harmful effects of chemical ingredients. Herbal medicines are in huge demand in the developed world for health care for the reason that they are efficient, safe and have lesser side effects. The formulations based on herbs are safe and effective. Herbal plants constitute a large segment of the flora, which provide raw materials for use by various industries. They have been used in the country for a long time for their medicinal properties. The decision to cultivate medicinal herbs should only be made in response to demand for particular herbs. The market is very competitive and could easily be oversupplied. The major contents of the book are carbohydrates, chemistry of carbohydrates daily requirement of carbohydrates, proteins, chemistry of proteins, some Indian food preparations rich in proteins, dynamic action of vitamin A, absorption and excretion of vitamin A, medicinal uses of ripe mango, mango in the treatment of night blindness etc. This book for the first time reveals the exact medicinal characteristics and how it works and cures the different disease to make mankind healthy. This book is very useful for scientists, doctors, scholars as well as entrepreneurs.

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## Database/Directory of Agriculture (Agro) Companies in India (5th

## Edition) [.xlsx, excel format]

**Format:** CD-Rom

**Book Code:** NID23

**Price:** Rs. 5,930.00    **US\$** 200.00

Offline Business directory is the best thing in today's business world. If you are searching for Buyers, then this Directory/Database is the perfect tool for you. By having the right business leads, you would be able to have immediate communication with prospective businesses, partners and customers through this boundless list of All India Companies in csv excel editable format (easy sorting and filtering). We offer an extensive suite of Directories/ database to assist you in reaching the right and targeted businesses and people quickly and easily. Business, B2B&Irm;, Industrial Directories, Mailing List are used for sales planning, finding Buyers, Sector, Business House and marketing research to perform business analysis. With our company database/Directory, you will have access to company list, Corporate/Leading Companies, Small & Medium Enterprises (SME), you will find a business list consisting of company contact details. We compiled list of companies in excel format to give you access to over hundred thousands of major & minor businesses and companies. From small business to Corporate Houses, our data is complete with business contact information to help you connect with the right companies or buyers. This database collection is a great resource for Buyers and those suppliers who offer their goods and services to Trade, Manufacturing industry, Companies, Corporate Houses & Industries in India. Includes: Agricultural Products, Agriculture, Farm Machine & Tools, Agro Chemicals, Dealers of Seeds, Dairy Products, Food & Agro Companies, Suppliers of Milk, Ghee, Milk Powder, Poultry Farm, Poultry Products, Dairy Plant & Equipments, Tractor Manufacturers, Dairy Equipments Manufacturers. Contains over 33,900 records. Detail Includes Name, Postal Address (33,500), Contact Person (3,700), Phone (31,400), Fax (2,700), E-mail (11,000), Website (2,700). Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xlsx

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## Directory/ Database/ List of Indian Processed Food and Agro Based Industries [.xlsx, excel format] 5th Edition



**Format:** CD-Rom

**Book Code:** NID62

**Price:** Rs. 3,894.00 **US\$** 150.00

Offline Business directory is the best thing in today's business world. If you are searching for Buyers, then this Directory/Database is the perfect tool for you. By having the right business leads, you would be able to have immediate communication with prospective businesses, partners and customers through this boundless list of Indian Processed Food and Agro Based Industries in csv excel format. We offer an extensive suite of Directories/ database to assist you in reaching the right businesses and people quickly and easily. Business Directories are used for sales planning, finding Buyers and marketing research to perform business analysis. With our company database/Directory, you will have access to company list. You will find a business list consisting of company contact details. We compiled list of companies in excel format to give you access to over hundred thousands of major & minor businesses and companies. From small business to Corporate Houses, our data is complete with business contact information to help you connect with the right companies or buyers. This database collection is a great resource for those suppliers who offer their goods and services to Indian Processed Food and Agro Based Industries like, Plant & Machinery Suppliers, Raw Material Suppliers, Packaging Material Suppliers, Office Equipment Suppliers, Office Furniture Suppliers, Mobile Companies, Advertisement Agencies, Office Stationery Suppliers, Courier Companies, IT, Software Companies, Labour Contractors, etc. Information in this database contains over 22,600 Indian Processed Food and Agro Based Industries from all over India. Details Include Company Name and Postal Address (22,500), Contact Person (11,900), Phone (20,700 Landline /Mobile), Fax (7,000), E-mail (17,200), Website (4,350). Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xlsx

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## **Importers Directory of Food, Beverages & Tobacco Products (World Wide /International Buyers Database) 3rd Edition**

**Format:** CD-Rom

**Book Code:** NID63

**Price:** Rs. 4,307.00    **US\$** 150.00

**ABOUT:** Today much of the world's economy is based on the ability of countries to import and export goods to each other. This global economy is vital to allowing the exchange of technology and goods and relies upon a network of importers and exporters to ensure that goods can flow freely and be available to meet the ever growing demand of the public. In order to keep track of the most reputable importers, we have created Database of Importers. Perhaps no other question is asked more frequently by exporters than "Where and how can I find importers?? Database of Importers is a perfect starting point for international exporters, manufacturers, traders and merchants looking to establish direct contacts with overseas customers. This Directory contains the latest and complete information about your potential business partners in several countries. The importers information listed in Buyers Directory has been collected from very reliable sources like electronic media, embassies and different association of concerned countries .Having in view the export promotional programme, our dedicated team has compiled Buyers Directory with hard work, efforts and devotion. The Directory contains the most comprehensive database of importer information. We at NPCS collect data from around the world, and then classify the raw data into the kind of intelligent categories that companies around the world use to:

- Find new importers, new markets and new business opportunities
- Enhance international trade
- Support sales & marketing.

Importers Directory of Food, Beverages & Tobacco Products (World Wide /International Buyers Database) 3rd Edition (Food Products, Dairy Products, Beverages, Milk, Chocolates, Cereal, Wheat, Bakery Products, Biscuit, Noodles, Pasta, Starch, Vegetables, Canned Food, Frozen Food, Seafood, Pulses, Spices, Pickles, Sauces, Fruits, Sugar, Juices, Honey, Eggs, Meat, Beer, Vinegar, Guar Gum, Wine, Soft Drink, Cigarettes, Liquor, Alcohol) Contains: Over 6,300 Importers / Foreign Buyers. Details include Company's Name, Contact Person (4,400), Address (6,200), Phone (6,300 Landline/ Mobile), E-Mail (3,400), Fax (4,500), Website (1,000) and Product Description. Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xls

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## [Handbook on Mushroom Cultivation and Processing \(with](#)

## Dehydration, Preservation and Canning)

**Author:** NIIR Board of Consultants and Engineers

**Format:** Paperback

**Book Code:** NI164

**Pages:** 544

**ISBN:** 9788178330341

**Price:** Rs. 1,275.00 US\$ 33.95

Mushrooms are the health food of the world. These are that fast growing basidiomycetous fungi which produce fleshy fruit bodies. They are rich in proteins, vitamins and minerals, so they are consumed as energy rich food. Mushroom has been attracting attention of mankind since ancient times and use of mushroom, as food is as old as human civilization.

Mushrooms are superior to many vegetables and beans in their nutritive value. It is very rich in protein, vitamins and minerals. Fresh mushrooms contain about 85% water and 3.2% protein. But dried mushrooms water content is low and protein level is high as 34 to 44% and the fat content is less than 0.3%. There are about 100 species of edible mushrooms all over the world. But only three of them are cultivated in India which are *Agaricus bisporus*, *Volvariella volvacea* and *pleurotus sajor caju*. Unfortunately, it is realized that mushrooms did not receive universal acceptance over the years since a number of naturally growing mushrooms are poisonous. Now the situation has been changed because the cultivated edible mushrooms are totally safe for human consumption. Mushroom cultivation fits in very well with sustainable farming and has several advantages: it uses agricultural waste products, a high production per surface area can be obtained, after picking; the spent substrate is still a good soil conditioner. They have less carbohydrate so they are believed to be suitable for diabetic patients. Fresh mushrooms have very limited life and hence they need to be consumed within few hours. But processing and canning increases their shelf life to few months. Osmotic dehydration is one of the important methods of processing mushroom which involves drying technology of mushroom. Mushrooms are very popular in most of the developed countries and they are becoming popular in many developing countries like India. Applications and market for mushrooms is growing rapidly in India because of their nice aroma, nutritious values, subtle flavour and many special tastes. Mushroom cultivation has been declared as a major thrust area by Government of India. Mushroom dish is a common item in all the big hotels. Mushroom production has increased many folds during the recent past. Mushrooms have found a definite place in the food consumption habits of common masses and there is a constant demand for it throughout the year. Some of the fundamentals of the book are nutritive value of edible

mushrooms, medicinal value of mushrooms, advantages of mushrooms, symptoms of mushroom poisoning, morphology of common edible mushrooms, classification of fungi a brief survey, chemical composition, anti nutritional factors and shelf life of oyster mushroom , osmotic dehydration characteristics of button mushrooms, mushroom cultivation, cultivation of white button mushroom (*agaricus bisporus*), factors determining the amount of spawn needed, fungicides for mushroom diseases insecticides for mushroom pests etc. The present book contains cultivation, processing, dehydration, preservation and canning of various species of mushrooms. It is resourceful book for agriculturists, researchers, agriculture universities, consultants etc.

# **The Complete Book on Spices & Condiments (with Cultivation, Processing & Uses) 2nd Revised Edition**

**Author:** NIIR Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI169

**Pages:** 888

**ISBN:** 9788178330389

**Price:** Rs. 2,275.00    **US\$** 60.95

The term spices and condiments applies to such natural plant or vegetable products and mixtures thereof, used in whole or ground form, mainly for imparting flavor, aroma and piquancy to foods and also for seasoning of foods beverages like soups.

Usually spices are an ingredient used to season a dish in the meal during its preparation and condiments are for using at the table to enhance the dish as each individual's tastes prefer. The great mystery and beauty of spices is their use, blending and ability to change and enhance the character of food. Spices and condiments have a special significance in various ways in human life because of its specific flavours, taste, and aroma.

Spices and condiments play an important role in the national economies of several spice producing, importing and exporting countries. India is one of the major spice producing and exporting countries. Most of the spices and herbs have active principles in them and development of these through

pharmacological and preclinical and clinical screening would mean expansion of considerable opportunities for successful commercialization of the product. Spices can be used to create these health promoting products. The active components in the spices phthalides, polyacetylenes, phenolic acids, flavanoids, coumarines, triterpenoids, sterols and monoterpenes are powerful tools for promoting physical and emotional wellness.

Some of the fundamentals of the book are definition of spices and condiments nomenclature or classification of spices and condiments, Indian central spices and cashew nut committee, origin, properties and uses of spices, forms, functions and applications of spices, trends in the world of spices, yield and nutrient uptake by some spice crops grown in sodic soil, tissue culture and in vitro conservation of spices, in vitro responses of piper species on activated charcoal supplemented media, soil agro climatic planning for sustainable spices production, potentials of biotechnology in the improvement of spice crops, medicinal applications of spices and herbs, medicinal properties and uses of seed spices, effect of soil solarization on chillies, spice oil and oleoresin from fresh/dry spices etc. The present book contains cultivation, processing and uses of various spices and condiments, along with photographs of machinery/equipments with addresses of their manufacturers.

The book is an invaluable resource for new entrepreneurs, agriculturists, agriculture universities and technocrats.

# **Potato and Potato Products Cultivation, Seed Production, Manuring, Harvesting, Organic Farming, Storage and Processing**



**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI199

**Pages:** 560

**ISBN:** 9788190439893

**Price:** Rs. 1,275.00 US\$ 33.95

Potato ranks fourth position in the world after wheat, rice and maize as non cereal food crop. Potato is probably the most popular food item in the Indian diet and India is one of the largest producers of potato. It is used in many ways like vegetable, potato wafers/chips, powder, finger chips etc. Potato tubers constitute a highly nutritious food. It provides carbohydrates, vitamin C, minerals, high quality protein and dietary fiber. Potato is a rich source of starch and it is consumed mainly for its calorific value, also contains phosphorus, calcium, iron and some vitamins. Boiling potatoes increases their protein content and almost doubles their calcium content. It is vastly consumed as a vegetable and is also used in various forms such as starch, flour, alcohol, and dextrin and livestock fodder. It is estimated that about 25 % of the potatoes, which are spoiled due to several reasons, may be saved by processing and preservation of various types of processed products. The potatoes can be processed for preservation and value addition in the form of wafers/ chips, powder, flakes, granules, canned slices. Potato granules are used for the preparation of various recipes, to add to vegetable and non vegetable recipes and to enhance the quantity as well as to enrich the food value. There is a huge potential for processed potato products such as potato flakes, potato powder, frozen potatoes, frozen French fries, potato chips/wafers are one of the most popular snack items consumed throughout world. International trade in potatoes and potato products still remains thin relative to production, as only around 6 percent of output is traded. High transport costs, including the cost of refrigeration, are major obstacles to a wider international marketplace. The industry is still growing at a rapid pace where French fries are showing the highest growth followed by potato chips and potato powder/flakes. It is by far the largest product category within snacks, with 85% of the total market revenue. This book basically deals with origin, evolution, history and spread of potato, potato products, quality requirements for processing, morphological, size and shape, defects, biochemical, dry matter, reducing sugars, phenols, inheritance, morphological attributes, tuber shape, growth cracks, hollow heart, internal rust spots, greening, biochemical attributes, glycoalkaloids, dry matter, reducing sugars, enzymic browning, development of varieties for processing, areas suitable for growing

processing potatoes, processing quality of Indian potato varieties, processed potato products, dehydrated products at village level, potato chips, french fries and flakes commercial production, grading manual for frozen French fried potatoes for frozen French fried potatoes, areas of production, varieties, receiving, determining the quality and condition of raw potatoes for frying purposes, determining the quality and condition of raw potatoes for frying purposes, etc. The present book covers complete details of potato cultivation and processing in proper manner. This book is an invaluable resource for agriculture universities, students, technocrats and entrepreneurs.

# Handbook on Rice Cultivation and Processing

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI200

**Pages:** 544

**ISBN:** 9788190568524

**Price:** Rs. 1,075.00 US\$ 28.95

Rice is the staple food of over half the world population. Rice is normally grown as an annual plant, although in tropical areas it can survive as a perennial crop and can produce a ratoon crop for up to 30 years. The rice plant can grow to 1 to 1.8 m tall, occasionally more depending on the variety and soil fertility. Since its origin, the spread of rice cultivation is extensive and rice is now being grown wherever water supply is adequate and ambient temperature are suitable. The rice grain is covered with a woody husk or hull, which is indigestible and is to be removed in the first step during processing for making the rice edible. Rice cultivation is well suited to countries and regions with low labor costs and high rainfall, as it is labor intensive to cultivate and requires ample water. Rice can be grown practically anywhere, even on a steep hill or mountain. The traditional method for cultivating rice is flooding the fields while, or after, setting the young seedlings. This simple method requires sound planning and servicing of the water damming and channeling, but reduces the growth of less robust weed and pest plants that have no submerged growth state, and deters vermin. While flooding is not mandatory for the cultivation of rice, all other methods of irrigation require higher effort in weed and pest control during growth periods and a different approach for fertilizing the soil. Drying is an essential step in the processing and preservation of paddy; it is the process that reduces grain moisture content to a safe level for storage. Milling is a crucial step in post production of rice. The basic objective of a rice milling system is to remove the husk and the bran layers, and produce an edible, white rice kernel that is sufficiently milled and free of impurities. India is the second largest rice producing country of the world after China. India also grows some of the finest quality aromatic rice of which basmati is the most high quality rice. This book basically deals with history, origin and antiquity of rice, seed rice and seed production, harvest and post harvest operations, water management practices for rice, diseases and pests of rice and their control, application of biotechnology in aromatic rice improvement, traditional methods of parboiling, modernization of parboiling process, solvent extractive rice milling, general types of quick cooking rice processes, dry milled rice products in brewing, breakfast cereals, rice flakes, puffed rice, rice in multi grain cereals etc. The present book contains cultivation and processing of rice

in various ways. The book is very resourceful for the entrepreneurs, technocrats, research scholars etc.

# **The Complete Technology Book on Meat, Poultry and Fish Processing (2nd Revised Edition)**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI202

**Pages:** 488

**ISBN:** 9788190568548

**Price:** Rs. 1,475.00    **US\$** 39.86

India is endowed with the largest livestock population in the world. Livestock and poultry in Indian tropical and sub tropics play a critical role in agriculture economy by providing milk, meat, eggs etc and provide flexible reserves during period of economic stress and buffer against crop failure. Mutton and Chicken is an important livestock product which in its widest sense includes all those parts of the animals that are used as the food by the man. So, with increase in population there is also an increasing consumer demand for food products that are low in fat, salt and cholesterol at local, national and international levels. Food manufacturers need to be able to produce meat, poultry and fish products which are considered to be healthy and that can meet the consumer demands. Meat industry, although is a very developing stage in India, is the top food industry in the world. Processed meat products are poised for continuous growth in the country. Poultry is one of the fastest growing segments of the agricultural sector. The main aim of this book is to provide complete guide on meat, fish and poultry processing. Owing to the wide variety of products and type of processes and treatments (curing, dry curing, fermentation, cooking smoking etc), this products need particular analytical methodologies for proper consumption. It examines the nutritional principles behind the drive for reductions in fat, salt and cholesterol in our diet, and illustrates formulations and procedures utilized to produce such products. The reader would get to explore brief discussion regarding the Indian meat industry followed by the next chapter which includes structure, composition and nutritive value of meat tissues, postmortem changes and some meat quality parameters are also added in the preceding chapters. It also discuss about meat cutting and packaging, processing of meat and meat products, microbial and other deteriorative changes in meat and their identification, chemical composition and nutritive value of poultry meat, pre slaughter handling, transport and dressing of poultry, fish products, freezing fish fillets, miscellaneous fish dishes, spreads, salads, loaves fish spreads for appetizers, sandwiches, shellfish and miscellaneous marine products, meat removal and pre freezing treatment, packing and freezing, classes and sizes of fresh and frozen oysters, freezing whole raw lobsters etc. The book contains manufacturing processes of various meat, chicken and fish

products in much illustrative manner. Special content on machinery equipment photographs along with supplier details has also been included. It is anticipated that, it turns out to be a resourceful book for entrepreneurs, technocrats, food technologists and others linked with this industry; as this would be an invaluable reference source for meat, poultry and fish processors, and food industry personnel involved in the development and marketing of new products.



# **The Complete Book on Beekeeping and Honey Processing (2nd Revised Edition)**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI203

**Pages:** 544

**ISBN:** 9788190568555

**Price: Rs. 1,475.00 US\$ 39.86**

Beekeeping is the maintenance of honey bee colonies, commonly in hives, by humans. Bees are accommodated in artificial lives where they live comfortably within easy reach of the bee keeper for examination and extraction of surplus lovely, after keeping of sufficient lovely in the combs for the bees. Honey is a part of bees, which gather sugar containing nectars from flowers. Honey should be processed as soon as possible after removal from the hive. Honey processing is a sticky operation, in which time and patience are required to achieve the best results. Careful protection against contamination by ants and flying insects is needed at all stages of processing. Bee honey is natural, unrefined food consumed as much in fresh or canned state. It is readily assimilated and is more acceptable to the stomach, particularly in the case of ailing persons, than cane sugar. It is an antiseptic and is applied to wounds and burns with beneficial results. Honey collection and its marketing in India are still not fully organised. The main uses of honey are in cooking, baking, as a spread on breads and as an addition to various beverages such as tea and as a sweetener in commercial beverages. Honey is the main ingredient in the alcoholic beverages mead, which is also known as honey wine or honey bear, honey is also used in medicines. A number of small scale industries depend upon bees and bee products. Honey and bees products finds use in several industries which are under; pharmaceuticals, meat packing, bees wax in industries, bee venom, royal jelly, bee nurseries, bee equipments and hives etc. There is considerable demand for the honey and other products. Outside the thousands of homemade recipes in each cultural tradition, honey is largely used on a small scale as well as at an industrial level. Some of the fundamentals of the book are history of beekeeping in India present, all India co ordinate research project on honey bee research and training, future plan for development, the pattern of beekeeping today, development of beekeeping equipments, beekeeping industry and honeybee species, bee hive products, medicinal properties of honey, bees and agriculture, pesticidal poisoning to honeybees, handling bees, queen rearing and artificial queen, beekeeping and ancillary industries, honey based industries, honey in pharmaceuticals, honey in meat packing, beeswax in industries, bee stings precautions and treatment. The book contains the steps of

bee keeping in proper manner and details of honey processing. This book is an invaluable resource for new entrepreneurs, technocrats and also for established enterprises.

# **The Complete Technology Book on Alcoholic and Non-Alcoholic Beverages (2nd Revised Edition)-(Fruit Juices, Sugarcane Juice, Whisky, Beer, Microbrewery, Rum and Wine)**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI209

**Pages:** 576

**ISBN:** 9788178331805

**Price:** Rs. 2,275.00    **US\$** 60.95

Alcoholic Beverage contains more than a minimal amount of ethyl alcohol or ethanol. They are classified into three general classes called beer, wine, and spirit. Non-Alcoholic Beverages are considered as the non-alcoholic version of alcoholic beverages. Non-alcoholic beverages include drinks that contains less than 0.5% alcohol. Changing tastes and preferences of consumers and inclination toward consumption of convenience food and beverages have led to the rise in demand for non-alcoholic beverages in the last few years. The global beverage market looks good with opportunities for alcoholic and non-alcoholic beverages. It is expected to reach in \$trillion and is forecast to grow at a CAGR of 3.0%. The major drivers for the growth of this market are growing urbanization, and disposable income. The non-alcoholic segment is expected to show above average growth. Consumer preferences, growing population, and health awareness are the major drivers. Within global beverage industry, beer is expected to remain the largest segment by value. Acceptance of alcohol consumption by consumers, population base of the young generation, and increasing per capita income are the major driving forces that spur growth for this segment over the forecast period. The rapidly invading global culture is also ensuring a rising numbers of Beer Cafés and Microbreweries across the World. The major contents of the book are Grape Juice Processing, Apple Juice, Tropical Fruit Juices, Chemistry and Technology of Citrus Juices and By Products, Beer, Whisky, Rum, Table Wines, Carbonation and Filling, Flavouring and Emulsions, Microbrewery, Manufacturing Process, Process Flow Diagrams, Addresses of Plant & Machinery Suppliers and 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 Alcoholic and Non-Alcoholic Beverages Products Manufacturing.

## **Directory / Database of Corporate/Leading Companies/Industries in Indian Food, Beverages and Tobacco Products (with Financial Figures) 9th Edition [.xlsx, excel format]**

**Format:** CD-Rom

**Book Code:** NID142

**Price:** Rs. 5,015.00    **US\$** 150.00

Products: Meat, Eggs, Dairy Products, Sugar, Cocoa, Cocoa Beans, Cocoa Powder, Confectionery, Milling, Bakery, Packaged Food, Starch, Fruit/Vegetable, Edible, Sprit & Vinegar, Water, Soft Drink, Beer, Wine, Soya, Coconut, Honey, Yeast, Pickle, Sauce, Noodles, Pasta, RTE, Bread, Biscuit, Flour, Chocolate, Milk, Butter, Ghee, Cheese, Coconut Milk Powder, Rice Bran, Sooji, Cake & Rusk, Malted Milk Food Tulse, Zarda. Contains: 2,855 records with following Information: Name of Company, Address, City, Pin Code, Phone, Fax, Email (2,231), Website (1,009). Name of Directors, Location of Plants, Project Capacity, Production, Name of Products, Turnover, Product industry Code, List of Major Raw Materials with their consumption quantity & Raw material value, credit ratings. Comparison amongst companies ( Cash Flow, Cost as % of sales, Forex transactions, Growth in Assets & Liabilities, Growth in Income & Expenditure, Income & expenditure, Liabilities, Liquidity Ratios, Profitability Ratio, Profits, Return Ratios, Structure of Assets & Liabilities (%), Assets, Working Capital & Turnover Ratios) (\*Wherever available) Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xlsx

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## **Directory / Database of Corporate/Leading Companies in Indian Agriculture (Agro) Sector (with Financial Figures) 8th Edition [.xlsx, excel format]**

**Format:** CD-Rom

**Book Code:** NID144

**Price:** Rs. 4,425.00 **US\$** 150.00

Contains: 2,441 records with following Information: Name of Company, Address, City, Pin Code, Phone, Fax, Email (1,860), Website (776). Name of Directors, Location of Plants, Project Capacity, Production, Name of Products, Turnover, Product industry Code, List of Major Raw Materials with their consumption quantity & Raw material value, credit ratings. Comparison amongst companies ( Cash Flow, Cost as % of sales, Forextransactions, Growth in Assets & Liabilities, Growth in Income & Expenditure, Income & expenditure, Liabilities, Liquidity Ratios, Profitability Ratio, Profits, Return Ratios, Structure of Assets & Liabilities (%), Assets, Working Capital & Turnover Ratios) (\*Wherever available) Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel, .xlsx

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## **[Handbook on Citrus Fruits Cultivation and Oil Extraction](#)**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI223

**Pages:** 544

**ISBN:** 9788178331256

**Price:** Rs. 1,575.00 US\$ 42.56

Citrus fruits are produced all around the world. They contain healthy nutrition content that works wonders for the body. Citrus fruits act as a fabulous source of vitamin C and a wide range of essential nutrients required by the body. India only represents a mere 4% of global citrus fruit production. But now a day, there is a rise in its cultivation. This rise in citrus production is mainly due to the increase in cultivation areas & the change in consumer preferences towards more health & convenience food consumption & the rising incomes. Citrus fruits have long been valued as part of a nutritious and tasty diet. The flavours provided by citrus are among the most preferred in the world, and it is increasingly evident that citrus not only tastes good, but is also good for people. It is well established that citrus and citrus products are a rich source of vitamins, minerals and dietary fiber (non starch polysaccharides) that are essential for normal growth and development and overall nutritional well being. However, it is now beginning to be appreciated that these and other biologically active, non nutrient compounds found in citrus and other plants (phytochemicals) can also help to reduce the risk of many chronic diseases. Appropriate dietary guidelines and recommendations that encourage the consumption of citrus fruit and their products can lead to widespread nutritional benefits across the population. All citrus fruit is acid fruit. The acid fruits are the most detoxifying fruits and excellent foods. Lemon oil is obtained from the fruits of citrus Limonum, Risso (Rutaceae). Although the majority of commercially available essential oils are extracted from the original botanical material by use of steam distillation, most citrus essential oils are extracted by pressing the rinds of the citrus fruits. The oil of sweet orange is obtained from the fruits of citrus Aurantium Risso and the oil of bitter orange from fruits of citrus Bigaradia Risso (Auranciaceae). Orange Essential Oil is energizing and is usually well loved by men, women and children. Citrus fruit oils are cheaper than most other essential oils. Lemon or sweet orange oils that are obtained as by products of the citrus industry are even cheaper. Some of the fundamentals of the book are botanical classification, classification of genus citrus, criteria for citrus classification, information on important citrus fruits, subgenus fucitrus (edible citrus fruits), citrus cultivation, citrus fruits, kinnow mandarin, citrus fruit breeding, soil inspection for citrus family, nutrition for citrus world, proper

harvesting of citrus, post harvesting of citrus fruits, etc. This handbook on citrus fruits provides relevant information on most citrus crops, the basics of citriculture & production, pre & post harvest management, picking, storage etc. Selected topics on oil extraction of citrus fruits are also given to provide knowledge of the techniques used. This book will be helpful for technocrats, farmers, research scholar, institutions etc.



# **Fruits, Vegetables, Corn and Oilseeds Processing Handbook**

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI226

**Pages:** 592

**ISBN:** 9788178331270

**Price:** Rs. 1,675.00 US\$ 44.95

Fruits & vegetables are an important nutritional requirement of human beings as these foods not only meet the quantitative needs to some extent but also supply vitamins & minerals which improve the quality of the diet & maintain health. Fruit, vegetables & oil seeds processing is one of the pillars of the food & edible oil industry. India is the second largest producer of both fruits and vegetables. Fruits and vegetables are the reservoir of vital nutrients. Being highly perishable, 20 to 40% of the total production of fruits and vegetables goes waste from the time of harvesting till they reach the consumers. It is, therefore, necessary to make them available for consumption throughout the year in processed or preserved form and to save the sizeable amount of losses. At present, about 2% of the total produce is processed in India mainly for domestic consumption. Fruits and vegetables have great potential for value addition and diversification to give a boost to food industry, create employment opportunities and give better returns to the farmers. Oil seeds also play an important role in the food sector & daily life. Edible oils constitute an important component of Indian households. Domestic edible oil consumption in India is increasing. Self sufficiency in edible oils today stands at in recent years, availabilities of non conventional oil, rice bran oil, soybean oil, palmolein oil and cottonseed have increased. Oils are essential components of all plants. However, commercial oil production facilities only utilize plants that accumulate large amounts of oil and are readily available In order to improve the nutritional status of the people & also to exploit the export potential of processed products there is need to increase the productivity of processed food in the country. Currently, India accounts for 7.0% of world oilseeds output; 7.0% of world oil meal production; 6.0% of world oil meal export; 6.0% of world veg. oil production; 14% of world veg. oil import; and 10 % of the world edible oil consumption. Some of the fundamentals of the book are preservation of pineapple, mango and papaya chunks by hurdle technology, effect of boiling on beta-carotene content of forest green leafy vegetables consumed by tribals of south India, process development for production of pure apple juice in natural colour of choice, physical refining of rice bran and soybean oils, anti nutrients and protein digestibility of fababean and ricebean as affected

by soaking, dehulling and germination, quality changes in banana (*musa acuminata*) wines on adding pectolase and passion fruit, essential oil composition of fresh and osmotically dehydrated galgal peels, development of cold grinding process, packaging and storage of cumin powder, bakery products and confections, etc. This book deals completely on the basic principles & methodology of fruits, vegetables, corn & oilseed processing & its preservation. This will be very resourceful to readers especially to technocrats, engineers, upcoming entrepreneurs, scientists, food technologists etc.

# **The Complete Book on Gums and Stabilizers for Food Industry**

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI231

**Pages:** 480

**ISBN:** 9788178331317

**Price:** Rs. 1,275.00    **US\$** 33.95

Gums are plant flours (like starch or arrowroot) that make foods & other products thick. Gums are used in foods for many reasons besides being used as a thickener. Gums are important ingredient in producing food emulsifier, food additive, food thickener & other gum products. The main reason for adding a gum or hydrocolloid to a food product is to improve its overall quality. India is the largest producer of gums specially guar gum products. Similarly stabilizers are an indispensable substance in food items when added to the food items, they smoothen uniform nature and hold the flavouring compounds in dispersion. Gum technology stabilizers are carefully controlled blends of various food ingredients. Most processed foods need some sort of stabilization at some point during production, transportation, storage and serving. The science and technology of hydrocolloids used in food and related systems has seen many new developments and advances over recent years. The breadth and depth of knowledge of gums and stabilizers has increased tremendously over the last two decades, with researchers in industry and academia collaborating to accelerate the growth. Gums as food constituents or as food additives can influence processing conditions in the following ways; retention of water, reduction of evaporation rates, alteration of freezing rates, modification of ice crystal formation and participation in chemical reactions. Some of the fundamentals of the book are functions of gum, typical food applications, gums in food suspensions, rheology and characters of gums, natural product exudates, flavor fixation, ice cream, ices and sherbets, gelation of low methoxyl pectin, seaweed extracts, microbial gums, transformation of collagen to gelatin, cellulose gums, dairy food applications, bakery product applications, analysis of hydrocolloids, gums in food products, general isolation of gums from foods, identification of gums in specific foods, group analysis and identification schemes, group identification methods, qualitative group analysis etc. This book contains rheology of gums, plant sheet gums, microbial gums, cellulose gums and synthetic hydrocolloids different stabilizers used in food industry. The book will be very resourceful to all its readers, new entrepreneurs, scientist, food technologist, food industries etc.

# Handbook on Spices and Condiments (Cultivation, Processing and Extraction)

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI232

**Pages:** 640

**ISBN:** 9788178331324

**Price:** Rs. 1,575.00 US\$ 42.56

The term Spice and Condiments applies to natural plant or vegetable products or mixtures in whole or ground form, which are used for imparting flavour, aroma and piquancy to the food items. Spices and condiments are a major commercial crop in India, and earn a major part of foreign exchange annually. They have been the backbone of agricultural industry. The importance of spices and condiment in dietary, medicinal and other uses, and their commercial importance are immense. India is known the world over as the home of spices. Thus spices are an important group of agricultural goods, which are virtually indispensable in the culinary art. Spice processing includes different steps: spice cleaning, spice reconditioning and spice grinding. Some spices were also used for preserving food like meat for a year or more without refrigeration. In the 16th century cloves for instance were among the spices used to preserve food without refrigeration. Cloves contain a chemical called eugenol that inhibits the growth of bacteria. It is a natural antibiotic. It is still used to preserve food like Virginia Ham. Likewise later mustard and ground mustard were also found to have preservative qualities. India alone contributes 25-30 % of the total world trade in spices. It may be interesting to note that nine spices namely pepper ginger clove cinnamon cassia mace nutmeg pimento (allspice) and cardamom alone contributed as much as 90% of the total world trade. Pepper is the most important spice in the world and so also of India. This book basically deals with brief history of spices, uses of spices, world trade in spices area & production of spices in India, area and production of spices in India, major and minor spices of India, spice processing, quality issues with spices, bird chillies and Tabasco chillies, basil or sweet basil, seasoning blend duplication and tricks, sauces and gravies, snack seasonings, quality issues with spices, etc. This book is a single compendium which deals with all aspects and facts of spices and condiments which may meet the requirements of all those handling them at various stages, from harvesting to their end use. This book contains post harvest management, the potentials of genetic engineering, high production technology in spices with plantation and processing of various spices and condiments such as vanilla, turmeric, tamarind, saffron, black pepper, onion, mint, ginger, garlic, curry leaf, coriander etc.

# **Handbook on Fermented Foods and Chemicals**



**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI233

**Pages:** 672

**ISBN:** 9788178331379

**Price:** Rs. 1,875.00    **US\$** 50.67

Numerous foods are prepared by fermentation processes in which one or more kinds of microorganisms are responsible for the characteristic flavour or texture, and sometimes for the keeping quality of the product. The manufacture of fermented food products is carried out on a small scale in homes in every country. Fermented products are more palatable and are not as easily spoiled as the natural products. The microorganisms that produce the desirable changes may be the natural flora on the material to be fermented, or may be added as starter cultures. The yield of organic acids principally lactic, serve as a preserving agents. Lactic acid fermentation is an anaerobic intramolecular oxidation reduction process. Both homofermentative and heterofermentative lactic acid bacteria participate in food fermentations. In some fermented food products, yeasts and moulds also participate along with lactic acid bacteria. Most of the reactions in living organisms are catalyzed by protein molecules called enzymes. Enzymes can rightly be called the catalytic machinery of living systems. The real break through of enzymes occurred with the introduction of microbial proteases into detergents. Most of the enzymes are produced by microorganisms in submerged cultures in large reactors called fermentors. In choosing the production strain several aspects have to be considered. Industrial enzyme market is growing steadily. The reason for this lies in improved production efficiency resulting in cheaper enzymes, in new application fields. Tailoring enzymes for specific applications will be a future trend with continuously improving tools and understanding of structure-function relationships and increased search for enzymes from exotic environments. This field deals with how are the enzymes used and applied in practical processes. A lot of fungal, bacterial and actinomycete strains with potential for producing novel industrial enzymes have been identified. This book contains sterilization, fermentation processes, aeration and agitation, use of yeast, yeast production, fermentation raw materials, production of bacterial enzymes, bread making methods, effluent treatment, production of actinomycete protease, lactic acid, citric acid. This handbook will be very helpful to its readers who are just beginners in this field and will also find useful for upcoming entrepreneurs, existing industries, food technologist, technical institution etc.

# **Handbook on Milk and Milk Proteins**

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI241

**Pages:** 448

**ISBN:** 9788178331485

**Price:** Rs. 1,275.00 US\$ 33.95

Proteins play an important role in nutrition, taste, allergies, texture, structure, processing and yield performance. In the food industry, proteins are a key element of our diet and an important ingredient for food technologists. The total protein component of milk is composed of numerous specific proteins. Isolated milk protein products represent an important and valuable source of protein ingredients due to their recognized superior nutritional, organoleptic and functional properties. Milk protein is a rich source of essential amino acids and they have been the subject of intensive research for an effort to unravel their molecular structure and interactions, relationship between structure and functional attributes, interactions of proteins during processing and, more recently, their physiological functions. Free fatty acids (FFA) in fresh milk normally amount to less than 1% of the total milk fat, yet they are important because of their effect on milk flavour. Now a day, the processing of milk is part of a highly organized and controlled dairy industry, which produces and markets a multitude of dairy products. Functional milk proteins are perfectly suited for use in the dairy sector of food production and the modern food processing industry is placing more and more emphasis upon the utilization of protein ingredients to provide specific functional properties to a wide range of formulated foods. In recent years, there has been a great deal of progress in the understanding and management of milk proteins across the production chain. Some of the fundamentals of the book are surface tension of milk, lactose chemistry, milk proteins, phosphorylation of milk proteins, comparative aspects of milk proteins, utilization of milk proteins, heat stability of milks, heat stability of homogenized concentrated milk, lysinoalanine in milk and milk products, heat coagulation of type a milk, syneresis of heated milk, fatty acids in milk, milk gel assembly, mechanical agitation of milk, natural, leucocyte and bacterial milk, grass and legume diets and milk production. This book provides a complete overview and offers insights into topics for more in-depth reading on milk and milk proteins. The book covers chapters on milk proteins, biosynthesis & secretion of milk proteins, utilization, types of milk proteins, phosphorylation, milk glycoproteins and many more. It is hoped that this book will be very helpful to all its readers, students, new entrepreneurs, food technologist,

technical institution and scientists.

# **The Complete Book on Managing Food Processing Industry Waste**

**Author:** H. Panda

**Format:** Paperback

**Book Code:** NI245

**Pages:** 400

**ISBN:** 9788178331454

**Price:** Rs. 1,275.00    **US\$** 33.95

Food industry produces large volumes of wastes, both solids and liquid, resulting from the production, preparation and consumption of food. These wastes pose increasing disposal and can pose severe pollution problems and represent a loss of valuable biomass and nutrients. Many standard industrial waste treatment texts sufficiently address a few major technologies for conventional in plant environmental control strategies in the food industry. Environmental legislation has significantly contributed to the introduction of sustainable waste management practices worldwide. Considering the challenges in the area of food industry, efforts are to be made to optimize processing technologies to minimize the amount of waste. Food processing wastes have a potential for conversion into useful products of higher value as by product, or even as raw material for other industries, or for use as food or feed after biological treatment. There are many examples of utilizing waste materials from plant material processed by canneries, there are many other types of waste that can be utilized. In many canneries, the organic from the processing system is combined with the other types of non usable wastes, such as hardware, glass, cans, nails etc. Food industry should also have to concentrate on waste avoidance as well as utilization of process wastes. All the combined efforts of waste minimization during the production process, environmentally friendly preservation of the product, and utilization of by products would substantially reduce the amount of waste, as well as boost the environmental aspect of food processing industry. This book basically deals with utilization of food industry wastes, ultra filtration in the recovery of food waste, recovery of fruit and vegetable wastes, recovery of protein, the screening of vegetable wastes, fat extraction, treatment of fatty effluents, recovery and utilization of protein, conversion of bone to edible products, utilization of waste in animal feeds, production of earthworm proteins, use of microbiological agents in upgrading waste for feed and food, underutilized proteins for beverages, coffee and tea wastes, utilization of food waste in pet food industry, etc. Readers, technical institution, food technologists, technocrats, existing industries and new entrepreneurs will find valuable material in this book. This book gives a complete detail on invaluable waste management concepts, utilization of by-products and the

practical methods to implement them. This book deals on the techniques and methods for food processing wastage. Comprehensive in scope, the book provides solutions that are directly applicable to the daily waste management problems specific to the food processing industry.

# **The Complete Book on Fruits, Vegetables and Food Processing**



**Author:** Dr. H. Panda

**Format:** Paperback

**Book Code:** NI250

**Pages:** 648

**ISBN:** 9789381039229

**Price:** Rs. 1,675.00    **US\$** 44.95

Food processing is the transformation of raw ingredients into food, or of food into other forms. Food processing typically takes clean, harvested crops or butchered animal products and uses these to produce attractive, marketable and often long shelf-life food products. Benefits of food processing include toxin removal, preservation, easing marketing and distribution tasks, and increasing food consistency. In addition, it increases yearly availability of many foods, enables transportation of delicate perishable foods across long distances and makes many kinds of foods safe to eat by de-activating spoilage and pathogenic micro-organisms. Processed foods are usually less susceptible to early spoilage than fresh foods and are better suited for long distance transportation from the source to the consumer. The extremely varied modern diet is only truly possible on a wide scale because of food processing. Food Dehydration is a method of food preservation that works by removing water from the food, which inhibits the growth of microorganisms. The dehydration process has to check various parameters like heat-mass transfer, atmospheric pressure, equipments suitable for drying etc. to ensure suitable dehydration of food. Food processing techniques have to take measures on to maintain food safety and control risks and hazards associated with food processing. The book includes dehydration process of Onion, roasting of coffee beans, development process of Guava squash, preparation of fried potato chips, processing of rice, butter and margarine, canning of chilies Plums, processing and preservation of jack fruit, characteristics of sweetened dahi, cereal grains, instant chutneys from pudina and gongura, starch isolated from potato tubers, coating of cashew kernel baby bits, ripening changes in mango fruits, mechanical and thermal properties of maize, storage of basmati rice under carbon dioxide-rich atmosphere, effect of different varieties of soya bean on quality of paneer, analysis of menthol content in pan masala samples, preparation of dehydrated potato cubes, quality evaluation of raw dried mango slices khatai and mango powder amchur, packaging and storage of biscuits containing finger millet flour, storage effect on microbial safety of potato flour, processing and quality evaluation of ready-to-eat watermelon nectars etc. The book is highly recommended to new entrepreneurs, existing units who wants to get more information of processing of fruits

and vegetables.

# **The Complete Book on Cashew (Cultivation, Processing & By-Products)**

**Author:** Dr. H. Panda

**Format:** Paperback

**Book Code:** NI253

**Pages:** 640

**ISBN:** 9788178331560

**Price: Rs. 1,775.00 US\$ 47.95**

Cashew, scientifically known as *Anacardium occidentale*, is a unique nut with a fascinating story. This tropical nut is native to Northeastern Brazil but is now widely cultivated in countries like India, Vietnam, and Nigeria. The cashew tree thrives in warm and humid climates, with sandy soil being its preferred growing medium. The cashew nuts are located at the end of a kidney-shaped drupe called the cashew apple. This drupe contains a highly toxic substance known as urushiol, which can cause severe skin irritation. Farmers must take great care to protect themselves during the harvesting process.

Processing raw cashews involves several techniques and tools to transform the nuts into the delicious snack all love.

Once the cashews are harvested and separated from the cashew apple and kernel, they go through a series of steps to remove any impurities and enhance their flavor. The global cashew market size reached US\$ 7.2 Billion. The market to reach US\$ 9.3 Billion, exhibiting a growth rate (CAGR) of 4.14%. Cashews are kidney-shaped nuts that are a good source of protein and minerals. They are low in sugar and rich in oil, fiber, protein, healthy fats, antioxidants, magnesium, zinc, copper, and phosphorus. Cashews are commonly available in whole, roasted, and split form. They are obtained from fruit-producing trees and grow near the sea areas and are widely used in beverages, dairy products, cereals, bars, cosmetics, and bakery products. The book covers a variety of topics related to Organic farming, Cashew Processing, Production of CNSL Derivatives, Quality control of cashew kernels, Cashew Liquid, Purification of Cashew Nut Shell, additives from cashew nut shell liquid, Honey coated nuts, Volatile nut aroma and flavour compositions, producing cardanol, Bisphenol Compounds, Hydrophobically Modified Poly(acrylic acid) [PAA], Heat-curable epoxy resin composition, Adhesives for car body assembly, Preparation of Flavour or Fragrance Microcapsules and Silane-Modified Phenolic Resins. A thorough guide on Cashew manufacture and entrepreneurship. This book is a one-stop shop for everything you need to know about the Cashew, which is ripe with opportunity for producers, merchants, and entrepreneurs. This is the only book that covers the process of making commercial Cashew (Cultivation, Processing & By-Products). From concept through equipment procurement, it is a veritable feast of how-to information.

## Confectionery Products Handbook(Chocolate, Toffees, Chewing Gum & Sugar Free Confectionery)

**Author:** NPCS Board of Food Technologists

**Format:** Paperback

**Book Code:** NI254

**Pages:** 672

**ISBN:** 9788178331539

**Price:** Rs. 1,975.00 US\$ 52.95

Confectionery manufacture has been dominated by large scale industrial processing for several decades.

Confectionery implies the food items that are rich in sugar and often referred to as a confection and refers to the art of creating sugar based dessert forms, or subtleties (subtlety or sotelty), often with pastillage. The simplest and earliest confection used by man was honey, dating back over 3000 years ago. Traditional confectionery goes back to ancient times, and continued to be eaten through the Middle Ages into the modern era. Sugar confectionery has developed around the properties of one ingredient – Sucrose. It is a non-reducing disaccharide. The principal ingredient in all confectionery is sucrose, which in its refined form has little flavour apart from its inherent sweetness. This handbook contains Packaging in the confectionery industry, Structure of sugar confectionery, Flavouring of confectionery, Confectionery plant, Ingredients, Quality control and chemical analysis, Medicated confectionery and chewing Gum, Chocolate flow properties, General technical aspects of industrial sugar confectionery manufacture, Manufacture of liquorice paste, Extrusion cooking technology, Manufacture of invert sugar, Marzipan and crystallized confectionery. The manufacture of confectionery is not a science based industry, as these products have traditionally been created by skilled confectioners working empirically. The aim of this handbook is to give the reader a perspective on several processes and techniques which are generally followed in the confectionery industry. The texture and technological properties of confectionery products are to a large extent controlled by its structure. The book is aimed for food engineers, scientists, technologists in research and industry, as well as for new entrepreneurs and those who are engaged in this industry.

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## Handbook on Organic Farming and Processing

**Author:** Dr. H. Panda

**Format:** Paperback

**Book Code:** NI255

**Pages:** 400

**ISBN:** 9788178331546

**Price:** Rs. 1,275.00    **US\$** 33.95

India is an agro based country. So organic farming plays an important role in agro field. The popularity of organic farming is gradually increasing and now organic agriculture is practiced in almost all countries of the world, and its share of agricultural land and farms is growing. As the organic food market continues to expand, so do the opportunities for small farmers. Organic farming has emerged as the only answer to bring sustainability to agriculture and environment. This handbook is a comprehensive guide to growing, certifying, and marketing organic produce. Organic farming is not only a philosophy, but also a well-researched science that combines soil fertility, plant pathology and other biological and environmental sciences. The major contents of this book are Sustainable Agriculture, National Programme on organic farming, Integration with organics and biofertilizers, Bulky organic manures and crop residues, Manuring on sight, Manuring potentials, Green Manuring, Production and promotion of organic fertilizers, Vermi composting, Response of crops to organic fertilizers, Phosphate solubilizing, *Bacillus thuringiensis*, Crop residue management, Integrated nutrient management towards sustainable agriculture, Integrated farming system, Mechanism of nitrogen fixation, Economics and marketing of organic farming. As we have seen, the booming development taking place in organic farming and marketing offers many opportunities. We will be able to go on contributing to the establishment of organic production systems and this could lead to changes in life style and consumption patterns that will reach far beyond food and nutrition. This book will be very helpful to soil scientists, microbiologists, biologists, students, new entrepreneurs, fertilizer industries, training centers and to all those interested in efficient use and sustainable farming.

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## **Bakery Industry in India (Bread, Biscuits and Other Products) Present & Future Prospects, Market Size, Statistics, Trends, SWOT Analysis and Forecasts (Upto 2017)**

**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI265

**Pages:** 118

**ISBN:** 9789381039366

**Price: Rs.** 35,400.00 **US\$** 980.00

The market research report titled 'Bakery Industry in India (Bread, Biscuits and other products) – Present & Future Prospects, Market Size, Statistics, Trends, SWOT Analysis and Forecasts (Upto 2017)' released by Niir Project Consultancy Services, provides a comprehensive analysis on Indian bakery industry covering detailed reporting of the bread and biscuits sector in India. The report also provides a bird's eye view of the global bakery industry with details on projected market size and then progresses to evaluate the Indian industry in detail. The report elucidates the structure of Indian bakery industry, its classification in various products (Biscuits, bread, cakes, pastries, buns and rusks) and then provides a categorical overview of bread and the biscuits sector. The Indian biscuit sector is dominated by players like Britannia, Parle and Sunfeast brand (ITC) together with other small players like Priyagold, Anmol Biscuits, Cremica etc whereas bread sector has only two major players, Britannia and Modern; and a host of regional players like Harvest Gold, Bonn, Vibbs etc. The report provides an expansive market analysis of the Indian bakery sector by covering areas like growth drivers, trends prevailing in the industry as well as comprehensive SWOT analysis of the sector. The report identifies growth factors of the industry as changing perception of the bakery products coupled with changing lifestyles of the Indian population. Consumption of bakery products was not in the Indian culture; however with changing eating habits of the people and with rising western influence on food consumption patterns, bakery products today have got takers from all age groups in the country. Rising preference for premium biscuit category is another factor that will contribute in the volume growth for the industry. Glucose segment has been losing its share to categories like cookies and cream biscuits which are growing at a much higher rate than the overall biscuit sector. Also the industry has been experiencing fortification of the bakery products in order to satiate the burgeoning appetite of the 'health conscious' Indian. Numerous healthy products have been launched in the bakery segment and are gaining popularity at a high rate. Mounting presence of bakery chains has further triggered the growth in the sector. Several international bakery chains have entered in India recognizing potential of the industry. Trends that have been gaining ground in the sector are e-retailing of the bakery products, aggressive

expansion plans of the incumbents as well as technological and ingredients advancement. Just when you thought that electronics and clothes were the only popular categories in e-retailing, there came bakery products which have been gaining traction in the e-retailing segment. Bakers are also bringing innovation and advancement in the technology and ingredients they use. Packaging front has also seen some changes in the past years. The report further evaluates the position of the industry by providing insights to the SWOT analysis of the industry. Large Indian population, abundant supply of raw materials and low capital requirements are some strengths of the bakery segment in India. India is among top producers of key raw materials of the bakery industry which puts sector in the sweet spot. The sector faces challenges in the form of raw material fluctuations, high taxation as well as its unorganized nature. Industry's raw materials being agricultural in nature are exposed to seasonal fluctuations in terms of availability and price movements. Rising competition in the sector due to low capital requirements and high growth rate of the sector is another impediment faced by the industry. However even after such challenges, the industry has opportunities galore. Low consumption of bakery products in the industry and spurt in the organized retail in the country are some of the biggest opportunities for the bakery players. Rising incomes as well as emergence of new middle class segment will also be key factors in the growth for the industry. Indian bakery segment is already in a favorable position with high rural penetration of its products which will help it tap the Indian rural consumption boom. The next segment of the report scrutinizes the demand supply scenario of the bakery industry with projections of important numbers covering the overall bakery sector as well as biscuit and bread segment also. The report also provides you a succinct view on the foreign trade of bakery products. It captures the current market size of the sector as a whole together with bread and biscuit segment coupled with forecasts for the next five years. The report also includes key player profiles of players like Britannia Industries Ltd, Parle Products Ltd, ITC Ltd, Surya Food & Agro Ltd (Priyagold) and Modern Food Industries India Ltd. The report shares vital information like shareholding pattern, revenue mix, plant location and financial summary of the aforesaid companies. The next segment provides complete financial comparison of bakery companies in India. Indian bakery industry is one of the biggest sections in the processed food industry of the nation and has undergone a massive change majorly on account of changing perception of bakery products and evolving consumer tastes. Rising urbanization and growth in the disposable incomes of the Indian population has proven



to be a magnet for international bakery chains owing to which the sector has seen an influx of foreign bakery companies foraying into India which has helped in improving the quality of Indian bakery products. Today there is a constant effort by the bakery players to innovate their product line to match up to Indian palate. Driven by evolving perception of bakery products in India, consumption boom in the nation and changing consumer preferences, we estimate the Indian bakery industry to touch levels of INR 483 billion in the next five years.

Reasons for Buying this Report: • This research report helps you get a detail picture of the industry by providing overview of the industry along with the market structure and classification • The report provides market analysis covering major growth driving factors for the industry and latest market trends in the industry • This report helps to understand the present status of the industry by elucidating a comprehensive SWOT analysis and scrutiny of the demand supply situation • Report provides analysis and in-depth financial comparison of major players/competitors • The report provides forecasts of key parameters which helps to anticipate the industry performance

Our Approach: • Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years. • The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players • We use reliable sources of information and databases. And information from such sources is processed by us and included in the report

**Emerging Opportunities in Booming INDIAN MAIZE PROCESSING INDUSTRY-Corn Starch, Dextrose, Liquid Glucose, Sorbitol, Gluten Meal, Germ Oil (Why to Invest, Core Project Financials, Potential Buyers, Market Size & Analysis)**

**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI271

**Pages:** 33

**ISBN:** 9789381039434

**Price:** Rs. 35,400.00 **US\$** 650.00

The research report titled Emerging Opportunities in Booming INDIAN MAIZE PROCESSING INDUSTRY-Corn Starch, Dextrose, Liquid Glucose, Sorbitol, Gluten Meal, Germ Oil (Why to Invest, Core Project Financials, Potential Buyers, Market Size & Analysis) released by Niir Project Consultancy Services aims at providing a roadmap for investing into the sector by covering all the critical data required by any entrepreneur vying to venture into maize starch segment in India. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product: • Good Present/Future Demand • Export-Import Market Potential • Raw Material & Manpower Availability • Project Costs and Payback Period We at NPCS, through our reliable expertise in the project consultancy and market research field, have identified maize starch & allied products project, in the maize processing segment, which satisfies all the above mentioned requirements and has high growth potential in the Indian markets. And through this report we aim to help you make sound and informed business decision. The report contains all the data which will help an entrepreneur find answers to questions like: • Why I should invest in maize starch project? • Who are the customers of the product? • What will drive the growth of the product? • What are the costs involved? • What will be the market potential? The report embarks the analysis by enhancing the basic product knowledge of the capitalist by stating details like product definition, product uses & application, by-products & related products and a general overview of the product market. In here, the report provides an overview of the maize starch market along with a snapshot of maize crop market in India. The report further enlightens the entrepreneur about the potential buyers of the product, Maize starch which will help him identify his customers and place his product correctly. It is followed by a detailed analysis & enumeration of various factors that makes the case for investing in the sector along with graphical representation and forecasts of key consumer data. The report further assesses the market potential of the product by listing import-export markets of maize starch & allied products, recent developments in the sector and by providing sector outlook and market size. The report then turns the focus towards

manufacturing side of maize starch & allied products. It provides project financials of a model project with specified product list and plant capacity along with excise and customs duty rates for maize starch for year 2013-14. It enumerates project information like raw materials required for manufacturing maize starch & allied products, manufacturing process, list of machinery and basic project financials. Project financials like plant capacity, costs involved in setting up of project, working capital requirements, payback period, projected revenue and profit are listed in the report. The above mentioned project details are for maize starch, sorbitol, dextrose, liquid glucose, vitamin C, germ oil and gluten feed plant. The report also provides key players in the segment with their contact details. Starch Industry is often termed as 'Sunrise Industry' due to its high growth potential and omnipresence across various other industries. This report helps an entrepreneur gain meaningful insights into the sector and make informed and sound business decision. Reasons for buying the report:

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, demand of the product and reasons for investing in the product
- This report provides vital information on the product like its definition, characteristics and segmentation
- This report helps you market and place the product correctly by identifying the target customer group of the product
- This report helps you understand the viability of the project by disclosing details like raw materials required, manufacturing process, project costs and snapshot of other project financials
- The report provides a glimpse of important taxes applicable on the product
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions

Our Approach:

- Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years.
- The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players
- We use reliable sources of information and databases. And information from such sources is processed by us and included in the report

# Emerging Opportunities in Booming Indian Beer Industry (Why to Invest, Core Project Financials, Potential Buyers, Market Size & Analysis)

**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI272

**Pages:** 33

**ISBN:** 9789381039441

**Price:** Rs. 29,500.00 **US\$** 500.00

The research report titled 'Emerging Opportunities in Booming Indian Beer Industry (Why to Invest, Core Project Financials, Potential Buyers, Market Size & Analysis)' released by Niir Project Consultancy Services aims at providing a detailed analysis of the investment opportunities prevalent in the Indian beer industry. The report covers crucial aspects like reasons for investment in the sector, core project financials, glimpse of the regulatory environment of the industry, potential buyers and analysis of the industry as a whole. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product: • Good Present/Future Demand • Export-Import Market Potential • Raw Material & Manpower Availability • Project Costs and Payback Period We at NPCS, through our reliable expertise in the project consultancy and market research field, have identified beer project, in the alcoholic beverages segment, which satisfies all the above mentioned requirements and has high growth potential in the Indian markets. And through this report we aim to help you make sound and informed business decision. The report contains all the data which will help an entrepreneur find answers to questions like: • Why I should invest in beer project? • Who are the customers of the product? • What will drive the growth of the product? • What are the costs involved? • What will be the market potential? The report begins by providing an overview of the beer industry in India and then proceeds to enhance the product knowledge of the entrepreneur. The report discusses beer as a product in various lights like product definition and product classification. The report further enlightens the entrepreneur about the potential buyers of the product, beer, which will help him identify his customers and place his product correctly. It provides a profound analysis of the investment factors of the project along with graphical representation and forecasts of key investment indicators which can help an entrepreneur assess the market potential of the product. The report further helps in enhancing the assessment of market potential by listing the export-import market of the product coupled with market size & outlook of the Indian beer industry as a whole. It also helps an entrepreneur in keeping abreast of the recent developments as well as the regulatory environment prevalent in the industry. The report

then turns its path towards the project insights of the beer plant. It includes core project financials of a model project with specified product list and plant capacity. It enumerates project information like raw materials required for manufacturing beer, manufacturing process, list of machinery and basic project financials. Project financials like plant capacity, costs involved in setting up of project, working capital requirements, payback period, projected revenue and profit are listed in the report. It also lists down the key players in the beer segment along with their contact details. This report helps an entrepreneur gain meaningful insights into the Indian beer sector and make informed and sound business decision. Reasons for buying the report:

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, demand of the product and reasons for investing in the product
- This report provides vital information on the product like its definition, characteristics and segmentation
- This report helps you market and place the product correctly by identifying the target customer group of the product
- This report helps you understand the viability of the project by disclosing details like raw materials required, manufacturing process, project costs and snapshot of other project financials
- The report provides a glimpse of important taxes applicable on the product
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions

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# **Market Research Report on Milk Processing & Dairy Products in India (Butter, Yogurt, UHT Milk, Cheese, Ice Cream, Ghee & Other Products)**



**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI276

**Pages:** 120

**ISBN:** 9789381039496

**Price: Rs.** 29,500.00 **US\$** 600.00

Market Research Report on Milk Processing & Dairy Products in India (Butter, Yogurt, UHT Milk, Cheese, Ice Cream, Ghee & Other Products) Market Prospects, Present Scenario, Growth Drivers, Demand-Supply Statistics, Industry Size, Sector Outlook, Analysis & Forecasts upto 2017 If you find yourself bewildered by innumerable variants of cheese, flavored yogurts, ice creams or UHT milk, in an expansive section of a modern retail store, then assume that you have hit the much evolved dairy section. Gone are the days when shopping of dairy products just meant choosing between plain curd or Cottage Cheese or basic sandwich spread, today dairy products have outdone their first forms and evolved into much urbanized and modern consumer centric products. To establish a better understanding of market potential of the evolved dairy products in India, Niir Project Consultancy Services has released a new study titled 'Market Research Report on Milk Processing & Dairy Products in India (Butter, Yogurt, UHT Milk, Cheese, Ice Cream, Ghee & Other Products)- Market Prospects, Present Scenario, Growth Drivers, Demand-Supply Statistics, Industry Size, Sector Outlook, Analysis & Forecasts upto 2017'. The report identifies the current & future market prospects of dairy products, the value drivers that will trigger the growth, opportunities & challenges faced by the sector coupled with government initiatives and porters 5 forces analysis of the industry. It helps you classify dairy industry on the basis of its business attractiveness and investment potential which can prove to be a vital link in prudent business decision making. The report provides a comprehensive analysis of the dairy products sector along with the financial details of dairy products companies. It begins by a brief on global dairy sector and then proceeds to discuss the Indian scenario of dairy industry in detail. It discusses the present scenario, structure and classification of the industry while defining the scope of the report. The sector has moved away from large consumption of milk in unprocessed and fluid form to higher intake of processed dairy products. The known factors for such rising preference for processed dairy products include growing disposable incomes, urbanization, spiraling trend of modern retail and growing acceptability of processed products. The report analyzes the above mentioned factors in growth drivers section supported by graphical representation and forecasts of data points. Growing population of middle

class households pose immense opportunities for a host of consumer industries; dairy being one of them. With higher incomes in their pockets and growing western influence on their taste buds, Indian middle class is well equipped to experiment with new products which will have a domino effect on the consumption of dairy products. Also, growing health consciousness among Indian population, low per capita consumption of various dairy products and rising food expenditure will provide ample opportunities for dairy players to seize. Further the report discusses various impediments faced by the dairy players while operating in the industry. The report in its entirety can prove to be an indispensable tool for assessing the market potential of dairy products in India. It analyzes the demand supply situation in the industry from different angles to enable better understanding of the topic. Demand for dairy products in India is captured by determining the demand for various dairy products as well as total exports. Similarly supply side is taken into account by assessing the production of milk in the country and population of milch animals, the production of various dairy products and lastly by scrutinizing the capital expenditure projects announced in the industry. Moving forward, the report analyzes the attractiveness of the sector by evaluating the status of porter's 5 forces prevalent in the industry. Any sector is said to be most attractive when the 5 forces are at their weakest and the report explicates the forces methodically to simplify the analysis. It also lists various initiatives undertaken by the Indian government to assist dairy industry as a whole. Lastly to give a fair view of the competition in the industry, the report shares information about players operating in the dairy sector. It gives business profiles of key players like Amul, Parag Milk Foods Ltd, Kwality Ltd and Mother Dairy Fruit & Vegetable Ltd. The next segment provides complete financial details of dairy players in the country like address of registered office, director's name and financial comparison covering balance sheet, profit & loss account and several financial ratios of the players. The report ends with a promising outlook of the sector. Indian dairy industry has been at the forefront with impressive growth rates and immense potential for an effervescent future abetted by rising demand for value added dairy products in the country. Fluid milk market in India has reached a saturation point and the growing acceptance of value added dairy products has brought winds of change for the industry. The Indian market has witnessed a spur in the demand of value added dairy products like cheese, yogurt, packaged milk and probiotic drinks which has invigorated the growth in overall dairy industry. Rising western influence on Indian food habits, rising concerns about quality of dairy products, health consciousness

and spiraling disposable incomes of consumers have resulted in higher demand for value added dairy products in India. Gauging the high demand potential in dairy products industry, a host of international and domestic players have set their foot in the Indian dairy domain. The share of milk processed in total milk produced has shown a healthy rise in the last 3-4 years. We anticipate the quantity of milk processed to cross 107 million tonnes by 2017 from ~66 million tonnes in 2013. Also we expect Indian dairy market to touch INR 6971 billion levels by 2017. Reasons for Buying this Report: • This research report helps you get a detail picture of the industry by providing overview of the industry along with the market definition, structure and its classification • The report provides in-depth market analysis covering major growth driving factors for the industry and opportunities & challenges prevalent • This report helps to understand the present status of the industry by elucidating a comprehensive porter 5 force analysis and scrutiny of the demand – supply situation • Report provides analysis and in-depth financial comparison of major players/competitors • The report provides forecasts of key parameters which helps to anticipate the industry performance Our Approach: • Our research reports broadly cover Indian markets, present analysis, outlook and forecast for a period of five years. • The market forecasts are developed on the basis of secondary research and are cross-validated through interactions with the industry players • We use reliable sources of information and databases. And information from such sources is processed by us and included in the report

# Emerging Investment Opportunity in Burgeoning Indian Milk Processing & Dairy Products Sector (Why to Invest, Business Prospects, Core Project Financials, Potential Buyers, Market Size & Industry Analysis)

**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI277

**Pages:** 47

**ISBN:** 9789381039502

**Price:** Rs. 29,500.00    **US\$** 500.00

While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product: • Good Present/Future Demand • Export-Import Market Potential • Raw Material & Manpower Availability • Project Costs and Payback Period We at NPCS, through our reliable expertise in the project consultancy and market research field, have identified dairy products project which satisfies all the above mentioned requirements and has high growth potential in the Indian markets. Niir Project Consultancy Services through its recently released report titled 'Emerging Investment Opportunity in Burgeoning Indian Milk Processing & Dairy Products Sector (Why to Invest, Business Prospects, Core Project Financials, Potential Buyers, Market Size & Industry Analysis)' aims to help you make sound and informed business decision before deploying your valuable resources. The report encapsulates all the vital information which can help an entrepreneur precisely evaluate the market potential and business prospects of dairy products sector. The report begins with the view of enhancing the basic industry knowledge of an entrepreneur by discussing the Indian dairy industry in brief. It disseminates information like its classification, structure and present scenario. Further, the next step report claims to be of paramount importance is the identification of potential consumers for the product to be launched. It identifies target consumer group for the dairy products industry supported by the forecasts of the same. The sections that form the very core of the report and are important factors for choosing an industry are the market potential of the industry and project details of the related plant. The report analyzes the market potential of the dairy products industry in 'Reasons for Investing' and 'Outlook' segment, where it discusses exhaustively the factors that will drive the growth of the industry and the opportunities existing for it. The factors are methodically explained supported by graphical representation and forecasts of key data indicators. The market size of the Indian dairy industry is expounded in the outlook section which further can be an effective tool for assessing the market potential of the industry. Turning towards the other important core, the report provides project details for a dairy products plant. It provides project financials of a model project with

specified product list and plant capacity along with excise and customs duty rates for dairy products for year 2013-14. The information that can be found in this section is raw materials required for dairy products, manufacturing process of various dairy products, list of machinery and basic project financials. Project financials like plant capacity, costs involved in setting up of project, working capital requirements, projected revenue and profit are listed in the report. The above mentioned project details are for dairy products plant producing Cottage cheese, flavored milk, butter, ghee, milk powder and condensed milk. The report also provides key players in the segment with their contact details. The Indian market has witnessed a spur in the demand of value added dairy products like cheese, yogurt, packaged milk and probiotic drinks which has invigorated the growth in overall dairy industry. Rising western influence on Indian food habits, rising concerns about quality of dairy products, health consciousness and spiraling disposable incomes of consumers have resulted in higher demand for value added dairy products in India and has made the sector an attractive opportunity for investment. Reasons for buying the report:

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- This report provides vital information on the product like its definition, characteristics and segmentation
- This report helps you market and place the product correctly by identifying the target customer group of the product
- This report helps you understand the viability of the project by disclosing details like raw materials required, manufacturing process, project costs and snapshot of other project financials
- The report provides a glimpse of important taxes applicable on the product
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions

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**Market Research Report on Packaged Fruit Juices & Drinks in India  
(Present & Future Potential, Market Insights, Growth Drivers,  
Opportunities, Industry Size, Porters 5 Forces, Demand Analysis &  
Forecasts upto 2017)**

**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI281

**Pages:** 84

**ISBN:** 9789381039540

**Price:** Rs. 35,400.00    **US\$** 750.00

Fruit beverages in India have come a long way since their first forms to find their permanent place in Indian households.

Today you will find yourself bewildered with the choices available if you wish to drink a fruit beverage. Innumerable and eclectic flavors combined with several variants (juices, drinks or nectars), is a testament to the fruit beverage industry transformation. In the view of the rising future potential of the industry, Niir Project Consultancy Services has released a new research report titled “Market Research Report on Packaged Fruit Juices & Drinks in India (Present & Future Potential, Market Insights, Growth Drivers, Opportunities, Industry Size, Porter’s 5 Forces, Demand Analysis & Forecasts upto 2017)”. The report aims at providing a thorough understanding and analysis of the industry by deeply exploring the present status as well as the future prospects of the fruit beverage sector in India in the wake of evolving market dynamics. The report establishes the study by covering data points like growth drivers for the industry, opportunities, present scenario, demand supply estimation & analysis, porters 5 force analysis and key player information. The report begins with a brief on global status of the fruit beverage industry and then shares information on the current status of the industry on the domestic front. The report discusses the overview of the sector along with its classification and structure and then further proceeds to analyze the growth drivers and opportunities for the industry. Rising per capita incomes of the Indians, bulging middle class, surging modern trade and growing urbanization will be the macro economic factors that will contribute to its growth. Escalating health consciousness among Indians has lured them towards fruit beverages and the players have left no stone unturned in capturing this sudden rush of demand. Although the fruit beverage industry is dominated by the loose beverage segment, the share of packaged fruit beverages is gradually rising and eating away the other share. The report then discusses the demand-supply scenario of packaged fruit beverages in India by analyzing various aspects. The demand for packaged fruit beverages is captured by studying the consumption volumes and the industry revenues while the supply side involves scrutiny of estimated fruit processing units in the country along with the fruit production statistics of India. The data discussed above is supported by graphical representations wherever necessary along with the key



forecasts. Moving forward, the report analyzes the attractiveness of the sector by evaluating the status of porters 5 forces prevalent in the sector. The sector is said to be most attractive when the 5 forces are their weakest and the report explicates the forces methodically to simplify the analysis. The next segment of the report includes industry players details like key player business profile and financial comparison of companies operating in this segment. Profiles of companies like Dabur India, PepsiCo India, Coca-Cola India and Parle Agro are included while peer group financials includes contact information like address of registered office, director's name and financial comparison covering balance sheet, profit & loss account and several financial ratios of the players. The report ends with a promising outlook of the sector. The fruit beverage industry in India is on its mark for a great run to success. Changing consumer dynamics like rising incomes, shifting preferences towards healthy drinks and changing perceptions will contribute majorly for the industry's next growth phase. Macro-economic factors like spurt in the modern trade, growing urbanization in the nation and burgeoning middle class will further lend a helping hand to the sector.

**Reasons for Buying this Report:**

- This research report helps you get a detail picture of the industry by providing overview of the industry along with the market structure and its classification
- The report provides in-depth market analysis covering major growth driving factors for the industry and opportunities prevalent
- This report helps to understand the present status of the industry by elucidating a comprehensive scrutiny of the demand – supply situation with forecasts and porters 5 force analysis
- Report provides analysis and in-depth financial comparison of major players/competitors
- The report provides forecasts of key parameters which helps to anticipate the industry performance

**Our Approach:**

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# How and Why to Start Your Own Fruit Beverage Industry

**Author:** NPCS Team

**Format:** Paperback

**Book Code:** NI282

**Pages:** 36

**ISBN:** 9789381039557

**Price:** Rs. 29,500.00 **US\$** 500.00

How and Why to Start Your Own Fruit Beverage Industry (Business Plan, Investment Opportunity, Why to invest, Market Potential, Project Financials of Fruit Juice Plant (FMCG Sector) for Indian entrepreneur, Project Feasibility, Potential Buyers, Market Size & Analysis) Indian fruit beverage industry has an effervescent future ahead of itself with rising health consciousness and growing affordability among Indians. The industry is in the pink of its health as fruit beverage consumption levels grows among Indian population and makes way for newer variants and flavors in the segment. Acknowledging the growth potential of fruit beverages in India, Niir Project Consultancy Services has launched its new report titled “How and Why to Start Your Own Fruit Beverage Industry (Business Plan, Investment Opportunity, Why to invest, Market Potential, Project Financials of Fruit Juice Plant (FMCG Sector) for Indian entrepreneur, Project Feasibility, Potential Buyers, Market Size & Analysis)”. The report qualifies as an investor’s guide for making investment into Indian fruit beverage segment. While expanding a current business or while venturing into new business, entrepreneurs are often faced with the dilemma of zeroing in on a suitable product/line. And before diversifying/venturing into any product, they wish to study the following aspects of the identified product: • Good Present/Future Demand • Export-Import Market Potential • Raw Material & Manpower Availability • Project Costs and Payback Period We at NPCS, through our reliable expertise in the project consultancy and market research field, have demystified the situation by putting forward the emerging business opportunity in fruit beverage sector in India and its business prospects. Through this report we have identified Fruit Juice project which has the potential to be a lucrative investment avenue. The report analyzes the investment feasibility of fruit beverage sector by discussing factors like potential buyers, reasons for investment, regulations, foreign trade and project financials. The report embarks the assessment by giving an overview of the overall fruit beverage sector in India as well as in world which is followed by the identification, estimation and forecasts of target consumers of the industry in India. The report further elaborates on factors that make a case for investing in the sector by profound analysis supported by graphical representation and forecasts of key data indicators. Evolving consumer dynamics like changing preferences, growing health consciousness and

increasing consumption levels will bring in the next phase of growth for the industry. The report then lists the import-export market of the products and the recent developments in the sector. The key segment of the report 'Project Details' is a useful tool for any entrepreneur who is willing to enter fruit beverage segment in India as it discusses investment vitals like raw materials required, list of machinery, manufacturing process and project financials of the project. The report includes project details of a model project manufacturing four types of fruit juices (Pineapple, Orange, Banana and Guava). The project financial sub section provides details like plant capacity, costs involved in setting up of project, working capital requirements, payback period, projected revenue and profit. It also provides contact details of major players operating in the Indian fruit beverage sector. The fruit beverage industry in India is on its mark for a great run to success. Changing consumer dynamics like rising incomes, shifting preferences towards healthy drinks and changing perceptions will contribute majorly for the industry's next growth phase. Macro-economic factors like spurt in the modern trade, growing urbanization in the nation and burgeoning middle class will further lend a helping hand to the sector. Reasons for buying the report:

- This report helps you to identify a profitable project for investing or diversifying into by throwing light to crucial areas like industry size, market potential of the product and reasons for investing in the product
- This report provides vital information on the product like it's characteristics and segmentation
- This report helps you market and place the product correctly by identifying the target customer group of the product
- This report helps you understand the viability of the project by disclosing details like machinery required, project costs and snapshot of other project financials
- The report provides a glimpse of important taxes applicable on the industry
- The report provides forecasts of key parameters which helps to anticipate the industry performance and make sound business decisions

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## [Oils & Fats Importers Directory / Database \(Global / World Wide /International Buyers\)2nd Edition](#)

**Format:** CD-Rom

**Book Code:** NID199

**Price:** Rs. 4,189.00 **US\$** 150.00

ABOUT: Today much of the world's economy is based on the ability of countries to import and export goods to each other. This global economy is vital to allowing the exchange of technology and goods and relies upon a network of importers and exporters to ensure that goods can flow freely and be available to meet the ever growing demand of the public. In order to keep track of the most reputable importers, we have created Database of Importers. Perhaps no other question is asked more frequently by exporters than "Where and how can I find importers?? Database of Importers is a perfect starting point for international exporters, manufacturers, traders and merchants looking to establish direct contacts with overseas customers. This Directory contains the latest and complete information about your potential business partners in several countries. The importers information listed in Buyers Directory has been collected from very reliable sources like electronic media, embassies and different association of concerned countries .Having in view the export promotional programme, our dedicated team has compiled Buyers Directory with hard work, efforts and devotion. The Directory contains the most comprehensive database of importer information. We at NPCS collect data from around the world, and then classify the raw data into the kind of intelligent categories that companies around the world use to:

- Find new importers, new markets and new business opportunities
- Enhance international trade
- Support sales & marketing.

Oils & Fats Importers Directory / Database (Global / World Wide /International Buyers) 2nd Edition (Fats & Oils, Vegetable Oil, Edible Oil, Palm Oil, Coconut Oils, Essential Oil) Contains: Over 2,000 Importers / Foreign Buyers. Details include Company's Name, Contact Person (480), Address (2,100), Phone (1,900 Landline/ Mobile), E-Mail (1,410), Fax (1,580), Website (460) and Product Description. Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel

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## [The Complete Book on Onion & Garlic Cultivation with Processing \(Production of Onion Paste, Flakes, Powder & Garlic Paste, Powder,](#)

Flakes, Oil)

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI290

**Pages:** 424

**ISBN:** 9788178331799

**Price:** Rs. 1,575.00 US\$ 42.56

Onion (*Allium cepa* L.) has been valued as a food and a medicinal plant since ancient times. It is also used in different forms of processed food, e.g. pickles, powder, paste, and flakes, and it is known for its medicinal values. Garlic belongs to the genus *Allium*, which comprises of approximately 600 known species distributed over the whole northern hemisphere. Characteristic for *Allium* species are herbaceous, perennial bulbous plants with a typical leek odour. Onion and Garlic are the spice commodities used for flavouring the dishes. These are considered as valuable medicinal plants offer variety of medicinal properties. Onion & garlic are important commercial crops with versatile applications. The demand for the processed products is increasing day by day due to its convenience to handle and use. Onion & Garlic can be processed into a wide variety of products. As per the estimate, approximately 6.75% of the onion produced is being processed. Besides fulfilling the constant demand of domestic population, India exports 13 to 18 lakh tons of onion annually worth around Rs. 2200 crores of foreign exchange revenue. Similarly in case of garlic, the production increased from 4.03 lakh tons to 12.26 lakh tons. In the world market, the demand for onion and garlic products is increasing as they are hygiene and easy to handle, able to avoid wastage. There are good prospects for these processed products to export to gulf countries and even Europe. Overall, global Garlic market continues to indicate a perceptible growth. After China, India is the second largest producer of onion and enjoys 19% share of the global onion production. Maharashtra and Karnataka are the chief onion producing states in India and contribute near about 45% of the total production of onion in India. Production of onion in India is about 15m tones a year. Proper placement of onion & garlic products (like; onion pickle, onion chutney, onion paste, garlic oil, garlic paste, garlic powder, garlic flakes, onion flakes, onion powder) in the departmental stores, super markets, shopping malls backed-up by publicity is the key to success. It is also possible to have tie-up with exclusive restaurants, star hotels, renowned caterers for their regular requirements. This handbook is designed for use by everyone engaged in the Onion & Garlic products manufacturing. Major contents of the book are Varieties of Onion, Onion Production, Onion Dehydration, Types of Garlic, Garlic

Growing, Garlic Dehydration, Onion Pickle, Onion Chutney, Onion Paste, Garlic Oil, Garlic Paste, Garlic Powder, Garlic Flakes, Onion Flakes, Onion Powder, Pest Species and Pest Control of Garlic and Onion, Integrated Weed Management, Packaging, Product Advertising and Sales Promotion, Marketing, Plant & Machinery Photographs, Addresses of Plant & Machinery Suppliers, Sample Plant Layouts etc. It will be a standard reference book for professionals, entrepreneurs, food technologists, those studying and researching in this important area and others interested in the field of Onion & Garlic products manufacturing.



# **The Complete Book on Tomato & Tomato Products Manufacturing (Cultivation & Processing)(2nd Revised Edition)**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI294

**Pages:** 344

**ISBN:** 9789381039687

**Price:** Rs. 1,400.00    **US\$** 37.83

Tomato is one of the most popular fruit in the world. The products of tomato like paste, juice, ketchup, etc. are widely used in kitchens all around the world. Tomatoes and tomato-based foods are considered healthy for the reason that they are low in calories, but possess a remarkable combination of antioxidant micronutrients. Tomato industry has been growing significantly over the past several decades. Changing life style and taste of consumers in different countries will motivate the growth of the tomato products market. The industries can retain maximum market share by differentiating their products in the market, by coming up with innovative products and by focusing on different packaged tomato products. India is one of the largest consumers of tomatoes, as well as the second largest tomato producing country in the world followed by China. Although raw tomato consumption is the mainstream means of consumption in today's India, the market for processed tomato is expected to expand in the near future considering the remarkable economic growth and dietary culture changes. Tomatoes are widely grown commodity with 136 mt production in the world. There is a big market for tomato products. The market scenario has revealed a positive indication for the specially packed tomato products in local as well as outside market. It is estimated that the total production of processed fruit & vegetable in India is about 15.0 lakh tonne. The major content of the book are varieties of tomato, select the best seeds and seedlings, growing preparation, canning of tomatoes, how to store & preserve tomatoes, basis for successful cultivation of tomato, crop husbandry, tomato pruning, dehydration/drying of tomatoes, canning of tomatoes, preserving by heating, tomato pulp, tomato paste, tomato ketchup, tomato juice, tomato powder, hazard analysis and critical control points, FPO and Agmark, products packaging, marketing. The purpose of this book is to present the elements of the technology of tomato preservation. The book explains raw material requirement, manufacturing process with flow diagrams of various tomato products with addresses of plant & machinery suppliers with their photographs. It deals with the products prepared from tomato commercially. It will be a standard reference book for professionals, entrepreneurs, food technologists, those studying and researching in this important area and others interested in the field of tomato products manufacturing.

## **Handbook on Pig Farming and Pork Processing (Feeding Management, Breeding, Housing Management, Sausages, Bacon, Cooked Ham with Packaging)2nd Revised Edition**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI302

**Pages:** 280

**ISBN:** 9789381039786

**Price:** Rs. 1,275.00    **US\$** 33.95

Pig farming is the raising and breeding of pigs. Among the various livestock species, piggery is most potential source for meat production and pigs are more efficient feed converters after the broiler. Pig rearing has traditionally been in the main occupational axis of the socially backward down-trodden class of Indian population since time immemorial. But at present commercial pig farming has greatly changed social scenario of this business in India. Now everyone is conscious about the economic importance of pig farming. Pig farming for meat production is one of the best and profitable business ideas for people. There are several highly meat producing pig breeds available and Initial requirements of small investment, quick returns and utilization of bristles and manure further increase the importance of this animal. This handbook is designed for use by everyone engaged in the pork production. The book explains about how to raise and care for pigs, by choosing the right breed, how to house, feed and breed them, butchering process, manufacturing process of various pork products and sample plant layouts & process flow sheets with machinery details. Major contents of the book are behavior of pigs, feeding management, pig breeding, housing management, diseases, pork processing, sausages, bacon, cooked ham, chilling and freezing of meat, meat packaging. It will be a standard reference book for professionals, food technologists, entrepreneurs, and others interested in startup of pig farming and pork production.

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## **Handbook on Manufacture of Indian Kitchen Spices (Masala Powder) with Formulations, Processes and Machinery Details (4th Revised Edition)**

**Author:** NPCS Board of Food Technologists

**Format:** Paperback

**Book Code:** NI307

**Pages:** 344

**ISBN:** 9788193733967

**Price:** Rs. 0.00 US\$ 0.00

Handbook on Manufacture of Indian Kitchen Spices (Masala Powder) with Formulations, Processes and Machinery Details (4th Revised Edition) (Chaat Masala, Sambar Masala, Pav Bhaji Masala, Garam Masala, Goda Masala, Pani Puri Masala, Kitchen King Masala, Thandai Masala Powder, Meat Masala, Rasam Powder, Kesari Milk Masala, Punjabi Chole Masala, Shahi Biryani Masala, Tea Masala Powder, Jaljeera Masala, Tandoori Masala, Fish Curry Masala, Chicken Masala, Pickle Masala, Curry Powder) Spices or Masala as it is called in Hindi, may be called the “heartbeat” of an Indian kitchen. The secret ingredient that makes Indian food truly Indian is the generous use of signature spices. From ancient times of the maharaja's, spices have added unforgettable flavours and life to Indian cuisine. Indian spices offer significant health benefits and contribute towards an individual's healthy life. There are a large number of various spices, used along with food such as Chilli (Mirchi), Turmeric (Haldi), Coriander (Dhania), Cumin (Jeera), Mustard (Rai), Fenugreek (Methi), Sesame (Til), Cardamon, Peppercorns (Kali Mirchi), Clove, Fennel (Saunf), Nutmeg and Mace etc. In modern times, international trade in spices and condiments have increased dramatically which could be attributed to several factors including rapid advances in transportation, permitting easy accessibility to world markets, growing demand from industrial food manufacturers of wide ranging convenience foods. As the demand for Indian spices is increasing day by day, Indian manufacturers are producing spices of high quality. The book presents the fundamental concepts of Spices (Masala Powder) Indian Kitchen Spices product mix in a manner that new entrepreneurs can understand easily. It covers Formulation for spices i.e., Chaat Masala, Chana Masala, Sambar Masala, Pav Bhaji Masala, Garam Masala, Goda Masala, Pani Puri Masala, Kitchen King Masala, Thandai Masala Powder, Meat Masala, Rasam Powder, Kesari Milk Masala, Punjabi Chole Masala, Shahi Biryani Masala, Tea Masala Powder, Jaljeera Masala, Tandoori Masala, Fish Curry Masala, Chicken Masala, Pickle Masala, Curry Masala. This book contains manufacturing process, Packaging and Labelling of Spices. The highlighting segments of this book are Spices Nutritional value, Special Qualities and Specifications, Cryogenic Grinding Technology, Food Safety & Quality, BIS Specifications, Quality Control, Market, Sample Production Plant Layout and Photograph of Machinery with Supplier's Contact Details. It also covers Good manufacturing practices in Food Industry, Case

Study for Everest and MDH Masala and Top Spice Brands of India. This book is aimed for those who are interested in Spices business, can find the complete information about Manufacture of Indian Kitchen Spices (Masala Powder). It will be very informative and useful to consultants, new entrepreneurs, startups, technocrats, research scholars, libraries and existing units. Tags

#ChaatMasala #SambarMasala #PavBhaji #GaramMasala  
#GodaMasala #PaniPuriMasala #KitchenKingMasala  
#ThandaiMasalaPowder #MeatMasala #RasamPowder  
#KesariMilkMasala #PunjabiCholeMasala #ShahiBiryaniMasala,  
#TeaMasalaPowder #JaljeeraMasala #TandooriMasala  
#FishCurryMasala #ChickenMasala #PickleMasala #CurryPowder  
#TurmericPowder #RedChilliPowder #DhaniyaPowder  
#GaramMasala #SabjiMasala #PopcornMasala #Kitchenspices  
#Kitchen #spices #organicspices #organic #cooking  
#MasalaPowder #GaramMasala #ChaatMasala #SambarMasala  
#PavBhajiMasala #Chillipowder #spicesprocessing  
#SpicesIndustry #StartupProject #startyourbusiness #startupidea  
#entrepreneur #projectreport #DetailedProjectReport  
#businessconsultant #businessfeasibilityreport #BusinessPlan  
#spicesbusiness #masala #spices #Indianspices #masala  
#marketopportunities #indianfood #NPCS

## **Indian Buyers Directory/ Database /List of Agricultural Products (Processed Food, Edible Oil, Commodities, Etc.) (with Financial Data)**

**Format:** CD-Rom

**Book Code:** NID208

**Price:** Rs. 4,130.00    **US\$** 150.00

Indian Buyers Directory/ Database /List of Agricultural Products (Processed Food, Edible Oil, Commodities, Etc.) (with Financial Data) Recommended for Food Industries, Importer/Exporters/Traders in Processed Food Products.. Offline Business directory is the best thing in today's business world. If you are searching for Buyers, then this Directory/Database is the perfect tool for you. By having the right business leads, you would be able to have immediate communication with prospective businesses, partners and customers through this boundless list of All India Companies in csv excel editable format (easy sorting and filtering). We offer an extensive suite of Directories/ database to assist you in reaching the right and targeted businesses and people quickly and easily. Business, B2B&Irm;, Industrial Directories, Mailing List are used for sales planning, finding Buyers, Sector, Business House and marketing research to perform business analysis. With our company database/Directory, you will have access to company list, Corporate/Leading Companies, Small & Medium Enterprises (SME), you will find a business list consisting of company contact details. We compiled list of companies in excel format to give you access to over hundred thousands of major & minor businesses and companies. From small business to Corporate Houses, our data is complete with business contact information to help you connect with the right companies or buyers. This database collection is a great resource for Buyers and those suppliers who offer their goods and services to Trade, Manufacturing industry, Companies, Corporate Houses & Industries in India. Contains over 1606 Indian buyers - details of buyers Include: Name of Buyer (Company), Address, City, Pin Code, Phone, Fax, Email\*, Website\*, Name of Directors, Location of Plants, Production Capacity, Name of Products, Turnover, Product industry code, List of Major Raw Materials with their consumption quantity & Raw material value, Note: All Records does not contain all fields of information. However, maximum information has been incorporated. Format: MS Excel

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## **The Complete Book on Ginger Cultivation and Manufacture of Value Added Ginger Products (Ginger Storage, Ginger Oil, Ginger**

## **Powder, Ginger Paste, Ginger Beer, Instant Ginger Powder Drink and Dry Ginger from Green Ginger)**

**Author:** NPCS Board of Consultants & Engineers

**Format:** Paperback

**Book Code:** NI308

**Pages:** 352

**ISBN:** 9789381039854

**Price: Rs. 1,575.00 US\$ 42.56**

Ginger is the common name for *Zingiber officinale*, which was originally cultivated in China and now equally spread around the world. Ginger is a herb but is often known as a spice, with a strong distinct flavor that can increase the production of saliva. The part that is used as spice on the plant itself is the rhizomes or ginger root. This ginger root is traditionally used with sweet foods in Western cuisine being included in popular recipes such as ginger ale, gingerbread, ginger biscuits and ginger cake. It is also used in many countries as a medicinal ingredient which many believe in. Historically, ginger has a long tradition of being very effective in alleviating symptoms of gastrointestinal distress. In herbal medicine, ginger is regarded as an excellent carminative and intestinal spasmolytic. Modern scientific research has revealed that ginger possesses numerous therapeutic properties including antioxidant effects, an ability to inhibit the formation of inflammatory compounds, and direct anti-inflammatory effects. India is the leading producer of ginger oil and dominates the ginger oil market with almost half shares out of total market. China is also known for ginger production and trade of ginger oil. Asia Pacific mainly exports ginger oil to North America and European markets. Increasing number of health conscious consumers, and their demands for natural oils and extracts based products is the major factor driving growth for essential oils and in turn ginger oil market. Ginger is majorly used in spices and thus ginger oils and oleoresins are preferred to prepared dried spices as flavoring in food industry, because they are more stable, contamination free, cleaner and can be easily standardized by blending. Thus the growth of food industry and spices demand are another factors driving growth of ginger oil market. The growth of natural personal care products industry is another growth driver for ginger oil market. The major content of the book are Ginger Cultivation, Farm and Forestry Production for Ginger, Diseases & Pest Management in Ginger, Medicinal Values of Ginger, Active Ingredients of Ginger, Pharmacological Activity of Ginger, Ginger Storage, Ginger Processing, Ginger Oleoresin, Ginger Oil, Ginger Beer, Ginger Powder, Ginger Paste, Instant Ginger Powder Drink, Ginger Candy, Dry Ginger from Green Ginger, Extraction of Ginger Oleoresin from Ginger-Root Using Co<sub>2</sub>, Production of Ginger Rhizome by Shoot-Tip Culture, Extraction of Essential Oils from Ginger Rhizome



Using Steam Distillation Method, Packaging and Labelling BIS Specifications, Good Manufacturing Practices, Sample Plant Layouts, Photographs of Machinery with Suppliers Contact Details. This book will be a mile stone for its readers who are new to this sector, will also find useful for professionals, entrepreneurs, those studying and researching in this important area.

# **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

**Book Code:** NI316

**Pages:** 392

**ISBN:** 9789381039908

**Price:** Rs. 0.00    **US\$** 0.00

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.

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# India Natural Food Colour Market - Industry Size, Share, Trends, Analysis and Forecasts upto 2027

**Author:** Ajay Kumar Gupta & NPCS Team

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India Natural Food Colour Market - Industry Size, Share, Trends, Analysis and Forecasts upto 2027 India Natural Food Market, By Form (Liquid and Powder), By Color (Green, Red, Orange, Blue Yellow, and Others), By Application (Bakery & confectionary, Beverages, Dairy, Process Food & Vegetables, and Others) and By Region (North India, South India, West India, and East India)-Growth Rate, Covid-19 Impact, Economic Impact, Size, Share, Trend, Drivers, Competitive Landscape, Opportunity, Limitations, Technological Landscape, Regulatory Framework, PESTEL Analysis, PORTER's Analysis. India Natural Food Market Overview: Natural food colors come from various materials, including herbs, seeds, plants, minerals, and other natural sources that are edible. When introduced to food or water, they impart color. Items derived from food and other edible raw source materials obtained by physical and chemical extraction resulting in the selective extraction of pigments with the nutritional or aromatic elements are natural food colors. They are available in various ways, including oils, powders, gels, and pastes. Food coloring is used both in the processing of commercial foods and in domestic cooking. India Natural Food Market Insights India's natural food color market is projected to have a USD 74.09 million market size in 2019. It is expected to reach USD 92.96 million by 2027, growing at a CAGR of 3.90% 2020-2027 across the region. It is attributed to the rising population coupled with the mounting awareness among the consumers towards health, which is predicted to boost the market. Individuals are becoming conscious of synthetic food colors' adverse health effects, which led to driving the demand for natural food colors. Artificial food colors make food appear more enticing. The interest of consumers, especially children, is attracted by brightly colored foods. The risk of attention-deficit/ hyperactivity disorder is with children fed processed food-flavored eatables. In children who eat larger concentrations of artificial food colors, these behavioral alterations are more familiar. However, the cost of natural food colors is high compared to synthetic food colors is predicted to hinder the market's growth over the forecasted period by 2027. Growth Driver Mounting Concerns Regarding the Adverse Impact of Synthetic Colors The rising concerns towards the adverse impact of synthetic colors are projected to boost the Indian natural food colors market over the

forecasted period of 2020-2027 at a significant rate. As companies continue to lure customers with enticing food coloring, food coloring continues to be in demand in the industry. As consumers continue to focus their judgment on food coloring, food coloring plays a critical role in the F&B industry. While synthetic colors continue to be in use, the correlation of multiple health issues with the intake of synthetic food coloring has arisen, leading to the quality of the additives challenged by consumers, which is expected to drive the Indian market. Furthermore, synthetic colors (Blue 1, Blue 2, Green 3, Red 40, Yellow 5, and Yellow 6) have been reported by the Food and Drug Administration (FDA) to show signs of cancer in lab animals. It was discovered that artificial shades, including yellow 5, yellow 6, and red 40, produce carcinogens. In soft drinks, caffeine is commonly used as a colorant and can cause heart palpitations and heart defects. Thus, the rising concerns towards the adverse impact of synthetic colors are estimated to boost the Indian market at a considerable rate. Increasing consumer awareness for clean-label products The increasing consumer awareness of the clean label products is estimated to drive the market during the forecasted period of 2020-2027 at a considerable rate. Demand for food with a natural and clean label is growing across India due to increasing hygiene consciousness, increasing customer purchasing capacity, and rising food adulteration instances. In addition, the concerns regarding food safety caused by toxic food pollution and the harmful effects of industrial pesticides have led to a growing number of customers seeking clean label products, which is projected to boost the Indian natural food colors market. Furthermore, the country's population tends to focus on improving their health and well-being, driving the trend's growing success. A thorough increase in the number of government programs supporting health and well-being is projected to boost the demand for natural food colors. A rise in the global population's real disposable income is anticipated to improve organic products' appetite for using natural ingredients. COVID-19 Impacts Insights In the new COVID-19, consumer shopping patterns and preferences change; some producers see consumers increase demand for certain products, while other producers are due to overcapacity and had to sell the product. The pandemic has greatly stimulated the organic food market. The uncertainty of the epidemic will also affect everyone in the entire supply chain from the planting end to the retail end. During the global pandemic of the COVID-19, organic food sales have seen a substantial increase, with individual growth figures even exceeding 40%. In India, the online organic food retailer sales

in March increased by 30%. The market landscape of clean label ingredients sees a surge in investments on the launch of clean label products. The use of natural colors such as the extraction of brown colors from rice is surging the demand for clean label ingredients in the processed food industry. Similarly, manufacturers are extracting and using organic orange color from carrot and pumpkin extracts. Although the increasing demand is good news for organic food retailers, the pandemic has brought problems to the global supply chain. Natural Colored food is becoming more and more popular because it symbolizes naturalness and health, and consumers have higher and higher requirements for its variety and quality.

**Form Segmental Analysis Based on Form**, the India region is segmented into Liquid and Powder. The liquid segment is dominating the market during the forecasted period of 2020-2027 due to its growing demand for enhanced viscosity, mouthfeel, product consistency, texture, shelf life, good taste, and visual appearance during food and beverage processing, which is projected to accelerate the market at a significant rate. Additionally, liquid coloring produces the softest level of color as compared to the powder segment. The propelling acceptance with high microbial stability property is estimated to drive the market.

**Color Segmental Analysis Based on Color**, India natural food color market is segmented into Green, Red, Orange, Blue, Yellow, and Others. The Red color segment dominates the market during the forecasted period of 2020-2027 due to its use in numerous recipes compared to other colors. Fruits, vegetables, and spices have heavy coloring that makes them ideal for homemade food coloring. It is not as concentrated as most colors, so it uses more. It works best for dying icing and frosting. However, the green color segment is estimated to have the fastest growth rate during the forecasted period by 2027. This is attributed to the rising demand for green color appearance drinks and beverages such as Khus Sharbat / Green Spring Mocktail, Mung Bean Cake, etc.

**Application Segmental Analysis Based on the Application**, the India region is segmented into Bakery & confectionary, Beverages, Dairy, Process Food & Vegetables, and Others. The Beverages segment is projected to hold the largest share during the forecasted period of 2020-2027 across the country. This is attributed to the rising demand for juices, soft drinks, and alcoholic drinks, which are estimated to propel the natural food color market at a considerable rate. In addition, 1.25 billion people in the country consume 5.9 billion liters of soft drinks a year. It makes India's per capita consumption of soft drinks high, but only 1/20th of that of the US, 1/10th of Kuwait, one-eighth of Thailand and the Philippines, and one-third of

Malaysia, which is estimated to boost the market. Region Segmental Analysis Based on Geography, the India Natural Food Market segmented into North India, South India, West India, and East India. North India's natural food color market is projected to have the fastest growth rate over the forecasted period of 2020-2027 across the country. This is attributed to the rising food color usage in processed food, bakery & Confectionaries, and beverages industry, which is estimated to drive the market. Natural food colors are used to improve the color and taste of processed or cooked food. It contains zero toxic-level natural extracts that are environmentally friendly. Natural food colors enhance the quality of food. Competitor Analysis Companies such as Chr. Hansen Holding A / S, D.D. Williamson, Döhler, Kalsec Inc, Kancor, ADM, DowDuPont, Sensient Technologies, DDW, and other prominent players are the key players in the India Natural Food Market. Key Stakeholders if¼ Market research and consulting firms if¼ Industry associations if¼ India Natural Food manufacturing firm if¼ Research organizations and consulting companies if¼ Organizations, associations, and alliances related to Natural Food if¼ Regulatory bodies if¼ Suppliers if¼ Retailers About Us: NIIR PROJECT CONSULTANCY SERVICES (NPCS), an ISO 9001:2015 company is one of the leading reliable names in industrial world for providing one of the most comprehensive suites of technical consulting services. We at NPCS are dedicated with passion and enthusiasm for helping young entrepreneurs is a real encouragement to proceed with a business start-up right from providing basic information to technology evaluation, sourcing and assimilation of detailed project reports, market survey studies and research through our advanced Industrial, Business and Commercial Databases. NPCS is a well-known technical consultancy providing focused services and we have been following stringent system and procedure to ensure only top quality strictly in conformity with delivering the needs of our clients in this rapidly growing & changing market. We have a full fledge of highly qualified Technical Consultants, Engineers, Economist and Technologists specialized in various disciplines and we take great pride in working as a team, and share the common goal of exceeding excellence. Our team is behind the success of many clients in their investment. Over the years, NPCS has become a well-known name in the industrial world for delivering a wealth of technical services and solutions to clients, both large and small. We provide the services through comprehensive knowledge of equipment and practices through our excellent team at a very economical price.

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

**Author:** Ajay Kumar Gupta

**Format:** Paperback

**Book Code:** NI335

**Pages:** 384

**ISBN:** 9788194737995

**Price:** Rs. 1,495.00    **US\$** 39.95

55 Most Profitable Micro, Small and Medium Scale Food Processing (Processed Food) Projects and Agriculture Based Business Ideas for Startup 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 Book are Soy Flour & Milk, Banana Powder, Ready to Eat Food



(Vegetable Pulao, Dal Makhani, Palak, Rajmah, Potato Peas, Mutter Mushroom), Tomato Paste, Edible Corn Oil, Energy Bar, Instant Noodles, Garlic Oil and Powder, Freeze Dried Vegetables, 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, Onion Powder, Cake & Pastry, Garlic Powder, Potato Powder, Besan, Pickles, Ice-Cream Cones, Honey, Flour Mill, Tutti-Fruitti, Confectionery, Chocos (Ready to Eat Breakfast Cereal Food), Ice Candy, Namkeen, Vermicelli, Mango Pappad (Aam Papad), Chilli Powder, Popcorn, Beer Plant, 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, BIS Specifications, Photographs of Machinery With Suppliers Contact Detail, Sample Plant Layouts. A total guide to manufacturing and entrepreneurial success in one of today's Food Processing Business. This book is one-stop guide to one of the fastest growing sectors of the Food and Agriculture Based Business, where opportunities abound for manufacturers, retailers, and entrepreneurs. This is the only handbook for commercial production ideas of Micro, Small and Medium Scale Food Processing Businesses. It serves up a feast of how-to information, from concept to purchasing equipment.

# **The Complete Book on Coconut & Coconut Products (2nd Edition)**

**Author:** P.K. Tripathi

**Format:** Paperback

**Book Code:** NI341

**Pages:** 432

**ISBN:** 9788195744701

**Price:** Rs. 1,695.00 US\$ 45.00

The Complete Book on Coconut & Coconut Products (Coconut Cultivation, Manufacturing Process of Coconut Oil, Desiccated Coconut, Coconut Powder, Coconut Milk, Coconut Milk Powder, Coconut Chips, Coconut Water, Vinegar, Activated Carbon, Coconut Jam with Machinery Equipment Details & Factory Layout) The coconut is a fruit of the palm tree, which grows in tropical regions. The white flesh of the coconut is used to make a variety of products, including milk, oil, butter, and flour. The manufacturing process of these products begins with the harvesting of coconuts from the trees. This book provides valuable information on coconut and its products. It covers topics such as the history of coconuts, the benefits of coconuts, and how to manufacture coconut products. This book is a must-read for anyone interested in learning more about this amazing fruit! This book would be great for everyone who wants to learn more about coconut and its products. If you're thinking about starting a business centered on coconuts, you're on the right track. Coconuts are a versatile product that can be used in a variety of ways, from cooking to cosmetics. Plus, they're a popular health food trend, so there's sure to be a market for your products. As with any new venture, it is important to do your research before diving in head first. Here is a guide to get you started on your coconut journey! The coconut oil market size is valued at CAGR of 5.1%. The desiccated coconut powder market is projected to register a CAGR of 7.45%. The global coconut milk market at a CAGR of 17.3%. The global coconut water market size growth rate (CAGR) of 16.1%. The global activated carbon market is estimated at a CAGR of 9.3%. Coconut oil are widely consumed in food industries among other coconut products. Many Asian and European countries widely use coconut products in food and bakery industries. Rise in awareness about benefits and functional properties of coconut products including coconut oil is leads to increase in its demand in food industry across the globe. Increase in consumer preferences for organic ingredients to be used in their foods is anticipated to boost the demand for organic desiccated coconut powder, thereby offering remunerative opportunities for market expansion in the near future. Coconut milk/cream is processed and preserved in different ready to use forms, such as canned products, pouches, and dehydrated form. Coconut milk and cream are used mainly in

food and bakery industry. In addition, it has also been used in cosmetics and personal care industries in the recent past and is expected to experience incremental demand in the near future. The aforementioned healthy ingredients make it the best rehydration drink, thereby increasing its adoption among gym-goers and athletes. Such health benefits are anticipated to boost the demand for coconut water across the globe. A complete guide to the Coconut & Coconut Products Manufacturing : Coconut Cultivation, Manufacturing Process of Coconut Oil, Desiccated Coconut, Coconut Powder, Coconut Milk, Coconut Milk Powder, Copra, Coconut Chips, Coconut Water, Vinegar, Activated Carbon, Coconut Jam. It's a veritable feast of how-to information, from concept through equipment acquisition.

# Food Colours, Flavours and Additives Technology Handbook (2nd Edition)

**Author:** Dr. Himadri Panda

**Format:** Paperback

**Book Code:** NI348

**Pages:** 536

**ISBN:** 9788195830411

**Price: Rs. 1,895.00 US\$ 48.00**

Food Colours, Flavours and Additives Technology Handbook

About the book Food colours are additives that can be natural or artificial. Natural food colours are obtained from fruits, vegetables, plants and minerals. Artificial food colours are made from coal tar dyes or petroleum byproducts. Food flavours are another type of additive that can be natural or artificial. Natural flavours come from herbs, spices and fruits while artificial flavours come from chemicals which have been artificially created to replicate natural flavours. Finally, additives are substances used in food processing as well as any substance added to foods either directly or indirectly for preservation, processing or improving their flavour. These substances may include nutrients like vitamins and mineral salts; biological controls such as yeasts; preservatives such as sulfur dioxide; antioxidants; emulsifiers; acidulants; anticaking agents and thickeners like guar gum; carrier solvents such as propylene glycol alginate, a thickener derived from seaweed. Carriers also function as stabilizers, preventing oils from separating out and appearing on top of a product. - substances that help other substances mix together smoothly -include carrier solvents such as propylene glycol alginate, a thickener derived from seaweed. Carriers also function as stabilizers, preventing oils from separating out and appearing on top of a product. The beverage segment is anticipated to be the largest in the food flavors market. Due to rising discretionary budgets among consumers, various synthetic flavors, including chocolate fruit and floral flavors, are growing in popularity in developing economies in Asia Pacific and the Middle East. The dairy, confectionery, and bread sectors are anticipated to increase significantly. The global market for food colours, flavours, and additives has been growing steadily over recent years. The food colors market is expected to reach a market valuation of US\$ 2.6 Bn, accelerating with a CAGR of 7.3%. Bakery, Cereal, and Snacks accounted for 18% of sales by volume in the food colors market. The global food colors market is driven by the highly growing demand for innovative, unique-looking food dishes, and altering taste and food appeal preferences due to the rise of social media among the populations worldwide. An increase in consumer awareness for clean-label food products and the additional health benefits that certain natural food colors possess is estimated to drive the market for food

colors. The use of food additives has increased in recent years. This is because consumers are increasingly looking for foods that are healthier and more convenient. Food additives can help to improve the nutritional value of food and make it more appetizing. High demand for new flavors from the food & beverages industry and continuous innovation drive the growth of the market. In addition, increase in requirement from the fast food industry is expected to provide growth opportunities in the food flavors market. The food color industry has been booming for a while now as people are more conscious about what they put into their bodies. With so many flavors to choose from for different dishes, it's just not enough anymore to make food taste good - it also has to look good. That's where food color comes in. Not only does it make your food look more appetizing, but it also makes your cooking more fun! The book covers a wide range of topics connected to Food Colours, Flavours and Additives, as well as their manufacturing processes. It also includes contact information for machinery suppliers, as well as images of equipment and plant layout. A comprehensive reference to manufacturing and entrepreneurship in the Food Colours, Flavours and Additives products business. This book is a one-stop shop for everything you need to know about the Food Colours, Flavours and Additives products manufacturing industry, which is ripe with potential for manufacturers, merchants, and entrepreneurs. This is the only comprehensive guide to commercial Food Colours, Flavours and Additives products manufacture. It provides a feast of how-to knowledge, from concept through equipment purchase.

**The Complete Book on Waste Treatment Technologies (Industrial, Biomedical, Water, Electronic, Municipal, Household/ Kitchen, Farm Animal, Dairy, Poultry, Meat, Fish & Sea Food Industry Waste and Machinery Equipment Details)**



**Author:** PROF. DR. MAHENDRA PAL

**Format:** Paperback

**Book Code:** NI349

**Pages:** 584

**ISBN:** 9788195676910

**Price:** Rs. 2,095.00 US\$ 53.00

Waste management is a global problem that continues to increase with rapid industrialization, population growth, and economic development. As the world hurtles towards the urban future, the amount of Municipal Solid Waste (MSW) is growing very fast. Waste includes any solid material or material that is suspended dissolved or transported in water or deposited on land. Wastes are generally classified into solid, liquid, & gaseous and are broadly classified as household waste; municipal waste; commercial and non-hazardous industrial wastes; e- waste, hazardous (toxic) industrial wastes; construction and demolition waste; health care wastes – waste generated in health care facilities (e.g. hospitals, medical research facilities); human and animal wastes; and incinerator wastes. In the recent years, modern society has become more responsible when it comes to waste management. The fast industrialization, urbanization, modern technology, and rapidly growing population in India have posed a serious challenge to the waste management. In India, per capita generation rate of municipal solid waste ranges from 0.2 to 0.5 kg/day. At present, the daily generation rate in South Asia, East Asia and the Pacific combined is approximately 1.0 million tons per day. The current scenario reveals that there is a tremendous scope for the development of waste treatment technologies and is expected to offer significant opportunities in the near future. Sustainability of waste management is the key for providing an effective service that can satisfy the need of end users. Solid Waste Management sector in India has become a very lucrative sector for investors. With a growing urgency for efficient waste management in many cities, there will be more and more employment opportunities in the sector. The participation of different sectors, roll of Government and private organization is important for better management of waste. This book describes the various waste treatment technologies like; Physical treatment techniques, biological treatment techniques, anaerobic lagoon techniques etc. It will be a standard reference book for professionals, entrepreneurs, students, teachers, researchers, administrators, and planners of various disciplines who are directly or indirectly involved in the waste management.

# **Millet Production, Processing and Value-Added Products Handbook**

**Author:** P. K. Chattopadhyay

**Format:** Paperback

**Book Code:** NI364

**Pages:** 536

**ISBN:** 978-81-969153-4-6

**Price:** Rs. 2,495.00    **US\$** 99.00

Millet Production, Processing and Value-Added Products Handbook (Millet Cookies, Flakes, Flour, Noodles, Pasta, Beverages, Extruded Snacks, Extruded Flakes, Instant Dosa Mix, Instant Pongal Mix, Instant Sorghum Idli Mix, Instant Sorghum Upma Mix, Bread, Cakes, Instant Laddu Mix, Pizza Base, Rawa/Suji, Vermicelli, Puffs and Sorghum Muesli with Manufacturing, Machinery, Equipment Details & Factory Layout) Millet is a type of cereal that is a part of the grass family Poaceae. This small round whole grain is grown in India and Nigeria, especially in Asia and Africa. There are multiple types of millets. However, most common varieties include Finger Millet, Foxtail Millet, Pearl Millet, Proso Millet, Little Millet and Sorghum Millet. Millet is loaded with nutritional value and that is why many dieticians and doctors recommend it as one of the breakfast cereal that must include in diet.

Additionally, millet muesli is also recommended by diet consultant experts because it is a more nutrient dense type of millets. Key features of the handbook include: Cultivation Techniques: The book provides detailed information on millet cultivation techniques, including land preparation, planting, irrigation, pest and disease management, and harvesting. It offers guidance on optimizing millet yields while minimizing environmental impact. Millet Varieties: Readers will find descriptions of different millet varieties, their adaptability to various climates and regions, and their nutritional profiles. This knowledge can help farmers select the most suitable millet varieties for their specific conditions. Processing Techniques: The handbook delves into post-harvest processes, from threshing and cleaning to milling and storage. It highlights best practices for preserving millet quality and reducing post-harvest losses. Value Addition Product Innovation: This handbook is a treasure trove of information on creating a range of millet-based products like flour, flakes, pasta, beverages, and snacks. Manufacturing process and recipes are provided, empowering entrepreneurs to innovate in product development. The Millet Market size is estimated at USD 11.53 billion, and is expected to reach USD 14.43 billion, growing at a CAGR of 4.60%. Millets are small grass seeds that are widely grown. They are treated as Cereal Crops for Human Food. Generally, a huge percentage of the Millets Produced is consumed and the remaining percentage is used for producing Beer, and Instant ready eat Foods. Breakfast Foods like

Cornflakes are made from Millet. The growing awareness regarding health and fitness among the consumers are resulting in a higher uptake of organic, natural, and gluten-free products, which, in turn, is fueling the millet market. This book offers comprehensive reference that covers various aspects of millet production and its value-added Products Production Process, Machinery, Equipment Details, Factory layout and Photographs with Suppliers Contact Details are also given. The Millet Production, Processing, and Value-Added Products Handbook is a comprehensive guide that offers a wealth of knowledge and practical insights into the world of millet agriculture and its various applications. This handbook serves as an invaluable resource for farmers, agricultural researchers, startups, entrepreneurs, food processors, and anyone interested in the cultivation, processing, and utilization of millet grains.

# 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.

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