

Cultivation of Tropical, Subtropical, Vegetables, Spices, Medicinal and Aromatic Plants



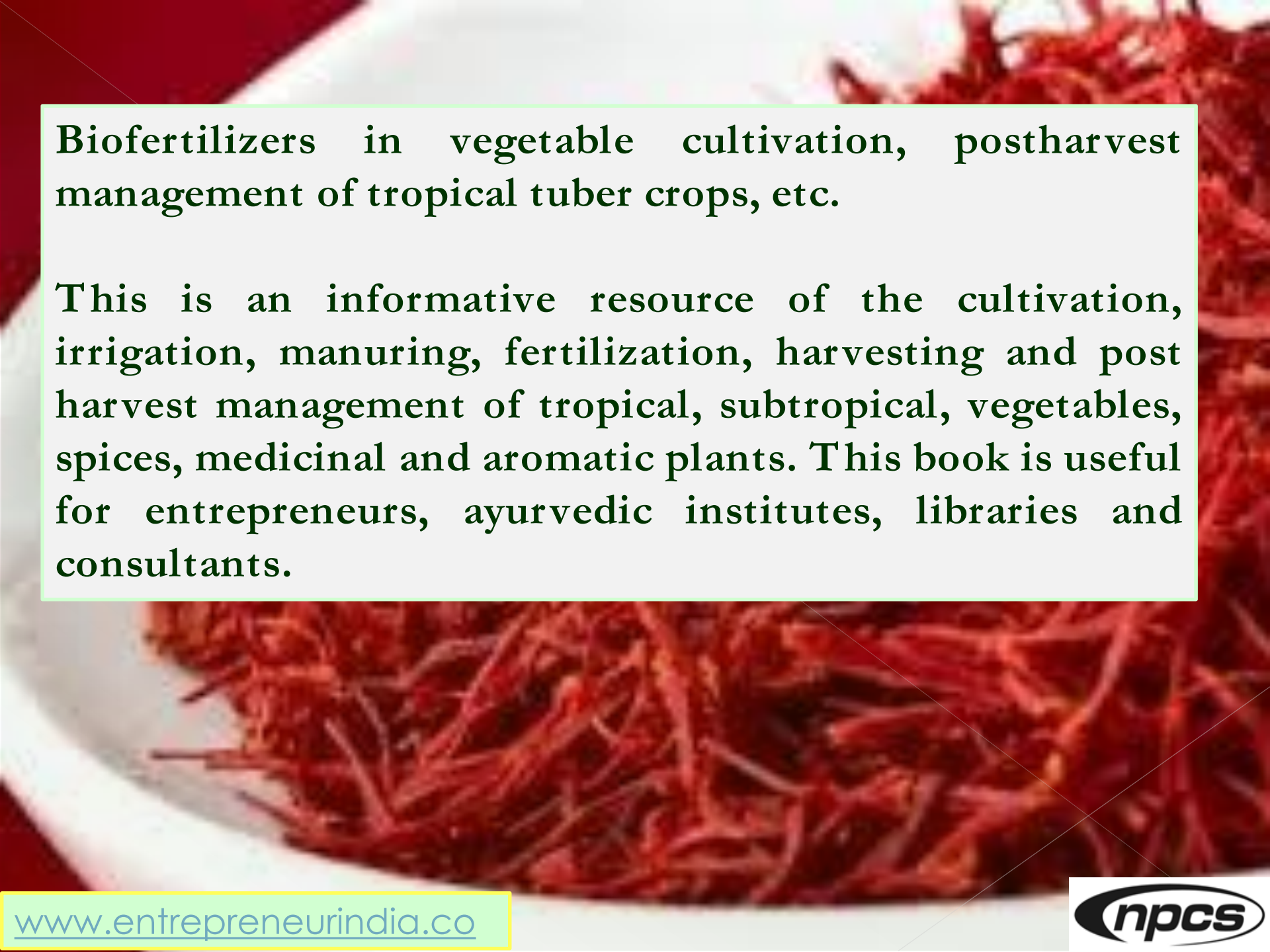
Introduction

Plant spices grown in tropical countries on small scale family farms or commercial farms, to provide foods for human or live stock, in dry or humid regions are highly abundant and taxonomically diversified. Vegetables comprise of a large number of plants, mostly annual, of which different parts like leaf, stem, flowers, fruit, root etc. are eaten. They are rich in nutrients and are essential items of a balanced diet. Vegetables are called protective food as their consumption can prevent several diseases. Many vegetables are important items of commerce and thus can play a major role in the economic development. Generally classification of horticulture plants are based on nature of growth climatic requirement continuation of growth

types of fruit parts used botanical relationship, salinity tolerance, ripening behaviour , botanical relationship, hardness or temperature tolerance, cool season vegetables, warm season vegetables, parts used as food, methods of raising, etc. Medicinal and aromatic plants are important for human health. These plants have been used from the prehistoric times to present day. These plants based medicines are consumed in all civilizations. It is believed that the herbal medicine can give good effect to body without causing side effects to human life. Besides, the usage of medical plants has been increasing as an important role that can support the economic system. The medical and aromatic plants for health are used as herbal treatments and therapies that can be new habits for culture.

Medicinal and aromatic 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.

This book majorly deals with classification of horticultural plants, classification of flowers, classification of spices, soil and climatic requirements of horticultural plants, beet root, bottle gourd, harvesting and post harvest management, poly house vegetable production in temperate regions, vegetables growing in containers, tea, performance of plants from cutting, vegetative propagation, rubber



Biofertilizers in vegetable cultivation, postharvest management of tropical tuber crops, etc.

This is an informative resource of the cultivation, irrigation, manuring, fertilization, harvesting and post harvest management of tropical, subtropical, vegetables, spices, medicinal and aromatic plants. This book is useful for entrepreneurs, ayurvedic institutes, libraries and consultants.

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- **Type of Cutting**
- **Juvenility**
- **Ringing**
- **Effect of Light**
- **Effect of Growth Substances**

- **Effect of Fungicides**
- **Humidity and Temperature**
- **Type of Cutting and Growth Substances**
- **Grafting**
- **Methods**
- **Performance of Grafted and Budded Plants**
- **Budding**
- **Methods**

- **Selection of Budwood**
- **Age of Rootstock**
- **Budding Material**
- **Treatment**
- **Care of Budded Plants**
- **Performance of Budded Plants**
- **Top Working**
- **Rootstock**

- **Effect on Growth and Yield**
- **Resistant to Pests and Diseases**
- **Influence of Scion on Growth and Yield**
- **Micropropagation**

53. OIL PALM

- **Seed Propagation**
- **Storage and Viability**
- **Germination**

- **Effect of Media and Temperature**
- **Effect of Oxygen**
- **Effect of Irradiation**
- **Effect of Growth Substances**
- **Biochemical Changes**
- **Seedling Growth**
- **Storage of Clone**
- **Vegetative Propagation**

➤ **Micropropagation**

54. ARECANUT

➤ **Seed Propagation**

➤ **Selection of Seed Nuts and Viability**

➤ **Germination**

➤ **Raising of Seedling**

➤ **Selection of Seedlings**

➤ **Vegetative Propagation**

➤ **Layering**

➤ **SPICES**

55. BETELVINE

➤ **Climate and Soil**

➤ **Varieties**

➤ **Propagation**

➤ **Cultivation**

➤ **Construction of Bareja or Boroj**

- **Raising of Support Plant in Open Cultivation**
- **Land Preparation**
- **Soil Treatment**
- **Planting**
- **Training/pruning**
- **Manuring and Fertilization**
- **Aftercare**
- **Irrigation**

➤ **Harvesting and Postharvest Management**

56. BLACK PEPPER

➤ **Climate and Soil**

➤ **Varieties**

➤ **Propagation**

➤ **Cultivation**

➤ **Planting**

➤ **Training/pruning**

- **Manuring and Fertilization**
- **Aftercare**
- **Irrigation**
- **Harvesting and Postharvest Management**

57. CARDAMOM (SMALL)

- **Climate and Soil**
- **Varieties**
- **Propagation**

- **Cultivation**
- **Planting**
- **Manuring and Fertilization**
- **Aftercare**
- **Irrigation**
- **Harvesting and Postharvest Management**

58. CARDAMOM (LARGE)

- **Climate and Soil**

- **Varieties**
- **Bebo**
- **Bharlangey**
- **Golsey**
- **Ramla**
- **Ramsey**
- **Sawney**
- **Propagation**

- **Primary Nursery**
- **Secondary Nursery**
- **Cultivation**
- **Planting**
- **Aftercare**
- **Irrigation**
- **Shade Regulation**
- **Roguing and Gap-filling**

- **Manuring and Fertilization**
- **Harvesting and Postharvest Management**

59. CINNAMON

- **Climate and Soil**
- **Varieties**
- **Propagation**
- **Cultivation**
- **Planting**

- **Manuring and Fertilization**
- **Irrigation**
- **Harvesting and Postharvest Management**

60. CLOVE

- **Climate and Soil**
- **Propagation**
- **Cultivation**
- **Planting**

- **Manuring and Aftercare**
- **Irrigation**
- **Postharvest Management**

61. CORIANDER

- **Climate and Soil**
- **Varieties**
- **Sidhu**
- **Sadhna**

- **Swathi**
- **Cultivation**
- **Sowing**
- **Manuring and Fertilization**
- **Weed Control**
- **Irrigation**
- **Harvesting and Postharvest Management**
- **Physiological Disorders**

62. CUMIN

- **Climate and Soil**
- **Varieties**
- **Cultivation**
- **Sowing**
- **Manuring and Fertilization**
- **Weed Control**
- **Irrigation**

➤ **Harvesting and Postharvest Management**

62. FENNEL

➤ **Climate and Soil**

➤ **Varieties**

➤ **Cultivation**

➤ **Sowing**

➤ **Manuring and Fertilization**

➤ **Weed control**

- **Irrigation**
- **Harvesting and Postharvest Management**
- **Physiological Disorder**

64. FENUGREEK

- **Climate and Soil**
- **Varieties**
- **Rajendra Kanti**
- **Hissar Sonali**

- **Cultivation**
- **Sowing**
- **Manuring and Fertilization**
- **Weed Control**
- **Irrigation**
- **Harvesting and Postharvest Management**

65. GINGER

- **Climate and Soil**

- **Varieties**
- **Cultivation**
- **Planting**
- **Manuring and Fertilization**
- **Weeding and Mulching**
- **Rotation and Intercropping of Ginger**
- **Harvesting and Postharvest Management**

66. NUTMEG

- **Varieties**
- **Propagation and Rootstock**
- **Cultivation**
- **Nursery**
- **Planting**
- **Aftercare**
- **Irrigation**
- **Harvesting and Postharvest Management**

67. TAMARIND

- **Climate and Soil**
- **Varieties**
- **Urigam**
- **Cultivation**
- **Propagation**
- **Planting**
- **Aftercare**

➤ **Harvesting and Postharvest Management**

68. TURMERIC

➤ **Climate and Soil**

➤ **Varieties**

➤ **Propagation**

➤ **Cultivation**

➤ **Manuring and Fertilization**

➤ **Aftercare**

- Intercropping
- Irrigation
- Harvesting and Postharvest Technology
- MEDICINAL PLANTS

69. ASGAND

70. DILL

71. GUGGAL

72. HENBANE

73. ISABGOL

74. KHASI KATERI

75. LIQUORICE

76. OPIUM POPPY

77. PERIWINKLE

78. PIPALI

79. RAUVOLFIA

80. SENNA

AROMATIC PLANTS

81. AMBRETTE SEED OR MUSKDANA

82. CELERY

83. CHAMOMILE

84. DAVANA

85. FRENCH JASMINE

86. INDIAN BASIL

87. JAVA CITRONELLA

88. KEWADA

89. LEMON GRASS

90. MINT

➤ Peppermint

➤ Spearmint

➤ Bergamot Mint

91. PALMAROSA OIL GRASS

92. PATCHOULI

93. ROSE GERANIUM

94. SCENTED ROSE

95. VETIVER

96. BIOFERTILIZERS

- **Nitrogen Fixing Biofertilizers**
- **Symbiotic Nitrogen Fixation**
- **Asymbiotic Nitrogen Fixation**
- **Azotobacter**
- **Phosphate Solubilizing Biofertilizers**
- **Mycorrhizal Fungi**
- **Actinorhizal Plants**

- **Biofertilizers in Vegetable Cultivation**
- **Seed Treatment**
- **Cutting/Set Treatment**
- **Seedling Treatment**

97. MANAGEMENT OF DISEASES

- **Disease Management**
- **Escape From Pathogen**
- **Preventing Entry of Inoculum**

- **Eradication**
- **Protection**
- **Reaction of Host Crop**
- **Prophylactic Measures (Therapeutics)**
- **Biological Control**
- **Chemical Control**

98. POSTHARVEST MANAGEMENT OF POTATO

- **Harvesting**
- **Postharvest Management**
- **Drying, Curing and Grading**
- **Dormancy**
- **Postharvest Losses**
- **Physiological Losses**
- **Pathogenic Losses**
- **Refrigerated Storage**

99. POSTHARVEST MANAGEMENT OF TROPICAL TUBER CROPS

- Cassava
- Harvesting and Handling
- Storage
- Utilization
- Processing
- Toxic Principles

- **Sweet Potato**
- **Harvesting and Handling**
- **Storage**
- **Utilization**
- **Processing**
- **Anti-nutritional Factors**
- **Elephant-Foot Yam**
- **Harvesting and Handling**

- **Storage**
- **Utilization**
- **Processing**
- **Anti-nutritional Factors**
- **Elephant-Foot Yam**
- **Harvesting and Handling**
- **Utilization**
- **Anti-nutritional Factors**

- **Taro**
- **Harvesting and Handling**
- **Storage**
- **Utilization**
- **Anti-Nutritional Factors**
- **Tannia**
- **Harvesting and Handling**
- **Storage**

- **Utilization**
- **Anti-Nutritional Factors**
- **Lesser Yam**
- **Harvesting and Handling**
- **Storage**
- **Utilization**
- **Greater Yam**
- **Harvesting and Handling**

- **Storage**
- **Utilization**
- **White Yam**
- **Harvesting and Handling**
- **Storage**
- **Utilization**
- **Arrow-Root**
- **Harvesting and Handling**

- **Utilization**
- **Chinese Potato**
- **Harvesting and Handling**
- **Storage**
- **Utilization**
- **Yam Bean**
- **Harvesting and Handling**
- **Storage**

- **Utilization**
- **Winged Bean**
- **Harvesting and Handling**
- **Winged Bean**
- **Storage**
- **Utilization**

100. POSTHARVEST MANAGEMENT OF MUSHROOM

- Postharvest Technologies
- Handling Fresh Mushrooms
- Harvesting
- Pre-Cooling
- Sorting
- Dipping/Treatments

- **Packaging**
- **Transportation**
- **Storage**
- **Processing**
- **Low Temperature**
- **High Temperature**
- **Drying**
- **Chemicals**

- **Pickling and Lactic Acid Fermentation**
- **Irradiation**
- **Minimal Processing**
- **Other Products**
- **Future Thrust and Export**

101. Tools and Equipments used in Horticulture

Tags

Growing tropical vegetables, growing vegetables in tropical climates, plant that grow in tropical climates, tropical food plants, vegetables for tropical and subtropical, vegetable production in tropical, subtropical, production of aromatic plants and medicinal, aromatic plants and medicinal, spices grown in tropical, cultivation, utilization, and processing for spices, medicinal, vegetables, aromatic plants, medicinal and aromatic plants is generating in tropical, tropical subtropical vegetables spices production, Seeds for Tropical Vegetables, growing vegetables in hot climates, plants that grow in tropical climates, What crops grow in tropical climates, Top 10 subtropical vegetables, vegetables in the tropics, selecting suitable tropical crops, how to grow vegetables, useful tropical plant list,

Which vegetables are easiest to grow in a tropical climate?, Growing unusual and subtropical fruit and vegetables, tropical vegetables that anyone can grow, Growing Vegetables Gardening Guide for Beginners, Tropical Planting and Gardening, Cultivation Of Tropical Subtropical Vegetables Spices, Collection of medicinal plants, 20 Most Profitable Medicinal Growing With Small Investment, Sustainable cultivation and harvesting of Medicinal plants, cultivation of medicinal plants in India and government support, medicinal plant cultivation business, most profitable medicinal plants in India, ayurvedic medicinal plants farming, Cultivation of medicinal plants getting popular, cultivation of medicinal plants for improving, Cultivation and Marketing of Medicinal Plants

, Suitability and profitability of medicinal and aromatic plants, Agriculture becomes profitable, Medicinal Plants Cultivation & Uses, Exploration and Characterization of Medicinal and Aromatic Plants, aromatic plants cultivation processing, aromatic plants farming, commercial cultivation of medicinal plants, list of aromatic plants in India, organic tropical and subtropical vegetables and spices production, Growing Vegetables and in Hot Climates, Conservation and sustainable use of medicinal plants, Cultivation of medicinal plants in developing nations, Top 10 subtropical vegetables, Low-cost tropical, growing vegetables in the tropics, Diseases Of Tropical And Subtropical Vegetables And Other Plants, Spices facts, information, pictures, Medicinal Plants Utilisation and Conservation,

Aromatic Plants Trade Production and Management, Medicinal and aromatic plants in agroforestry systems, Spice crops agroforestry systems, Cultivation of various Spices in India, Production Technology of Spices, spice production in India, Demand for Sustainable Spices, Role of Spices Board in the cultivation and export of Spices, Cultivation of Medicinal and Spice Plants, Cultivation and processing of spices, Spice Farming, Scope of Medicinal and Aromatic Plants farming, organic farming medicinal and aromatic plants, Organic Farming in spices, Commercialization of aromatic and medicinal plants, Cultivation, Marketing of Medicinal And Aromatic Plants ,Commercial cultivation of medicinal plants,

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- *Laboratory Testing Services*
- *Turnkey Project Consultancy/Solutions*
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- *We empower our customers with the prerequisite know-how to take sound business decisions*
- *We help catalyze business growth by providing distinctive and profound market analysis*
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Requirement collection

Thorough analysis of the project

Economic feasibility study of the Project

Market potential survey/research

Report Compilation

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- *Government Undertakings*
- *Individual Entrepreneurs*
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- *Foreign Investors*
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- *Educational Institutions*
- *Embassies & Consulates*
- *Consultancies*
- *Industry / trade associations*

Sectors We Cover

- *Ayurvedic And Herbal Medicines, Herbal Cosmetics*
- *Alcoholic And Non Alcoholic Beverages, Drinks*
- *Adhesives, Industrial Adhesive, Sealants, Glues, Gum & Resin*
- *Activated Carbon & Activated Charcoal*
- *Aluminium And Aluminium Extrusion Profiles & Sections,*
- *Bio-fertilizers And Biotechnology*
- *Breakfast Snacks And Cereal Food*
- *Bicycle Tyres & Tubes, Bicycle Parts, Bicycle Assembling*

Sectors We Cover Cont...

- *Bamboo And Cane Based Projects*
- *Building Materials And Construction Projects*
- *Biodegradable & Bioplastic Based Projects*
- *Chemicals (Organic And Inorganic)*
- *Confectionery, Bakery/Baking And Other Food*
- *Cereal Processing*
- *Coconut And Coconut Based Products*
- *Cold Storage For Fruits & Vegetables*
- *Coal & Coal Byproduct*

Sectors We Cover Cont...

- *Copper & Copper Based Projects*
- *Dairy/Milk Processing*
- *Disinfectants, Pesticides, Insecticides, Mosquito Repellents,*
- *Electrical, Electronic And Computer based Projects*
- *Essential Oils, Oils & Fats And Allied*
- *Engineering Goods*
- *Fibre Glass & Float Glass*
- *Fast Moving Consumer Goods*
- *Food, Bakery, Agro Processing*

Sectors We Cover Cont...

- *Fruits & Vegetables Processing*
- *Ferro Alloys Based Projects*
- *Fertilizers & Biofertilizers*
- *Ginger & Ginger Based Projects*
- *Herbs And Medicinal Cultivation And Jatropha (Biofuel)*
- *Hotel & Hospitability Projects*
- *Hospital Based Projects*
- *Herbal Based Projects*
- *Inks, Stationery And Export Industries*

Sectors We Cover Cont...

- *Infrastructure Projects*
- *Jute & Jute Based Products*
- *Leather And Leather Based Projects*
- *Leisure & Entertainment Based Projects*
- *Livestock Farming Of Birds & Animals*
- *Minerals And Minerals*
- *Maize Processing(Wet Milling) & Maize Based Projects*
- *Medical Plastics, Disposables Plastic Syringe, Blood Bags*
- *Organic Farming, Neem Products Etc.*

Sectors We Cover Cont...

- *Paints, Pigments, Varnish & Lacquer*
- *Paper And Paper Board, Paper Recycling Projects*
- *Printing Inks*
- *Packaging Based Projects*
- *Perfumes, Cosmetics And Flavours*
- *Power Generation Based Projects & Renewable Energy Based Projects*
- *Pharmaceuticals And Drugs*
- *Plantations, Farming And Cultivations*
- *Plastic Film, Plastic Waste And Plastic Compounds*
- *Plastic, PVC, PET, HDPE, LDPE Etc.*

Sectors We Cover Cont...

- *Potato And Potato Based Projects*
- *Printing And Packaging*
- *Real Estate, Leisure And Hospitality*
- *Rubber And Rubber Products*
- *Soaps And Detergents*
- *Stationary Products*
- *Spices And Snacks Food*
- *Steel & Steel Products*
- *Textile Auxiliary And Chemicals*

Sectors We Cover Cont...

- *Township & Residential Complex*
- *Textiles And Readymade Garments*
- *Waste Management & Recycling*
- *Wood & Wood Products*
- *Water Industry(Packaged Drinking Water & Mineral Water)*
- *Wire & Cable*

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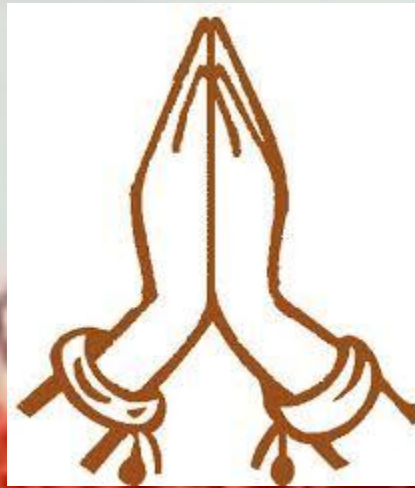


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