

Asiel Consultants' Capabilities in Food Processing, Agriculture & Horticulture

ASIEL has a pool of highly Qualified & Experienced Professionals (Food Technologist, Food Scientist & Engineers). We take up turnkey projects on many processed foods. Some of them are mentioned below:

- Ready to Serve Beverages (Fruit Based Beverages/Drinks like Frooti, Appy, Slice, Maaza, Real etc.).
- Packaged Drinking Water & Soda
- Carbonated Soft Drinks & Still Drinks
- Ice Creams & Candies
- Dairy Plant- We can set up full fledged dairy plant with capacity of 10KL 200KL per day for milk (in pouches) with products like curd, Lassi, Paneer, Ghee etc.
- Break Fast Cereals (like Corn Flakes)
- Snack Foods (Potato Chips, extruded snacks like Kurkure, Cheeseballs, ethnic Indian Snacks like Bhujia, Chanachurs, Coated Pea Nuts etc.).
- Edible Oils (Rice Bran Oil, Soyabean Oil etc.).
- Bakery Products (Biscuits, Cookies, Crackers, Cakes etc.).
- Meat & Poultry Products (right from Abattoirs/Slaughter house to frozen meat products like cuts, fillets etc.; ready to cook/ready to eat meat products like Sausages, Salami, Kababs, Samosas etc.).
- IQF (Individually Frozen Food) Project: a) Fruits & Vegetables b) Sea Foods like Prawns, Baby Octopuses, Squids etc.
- Traditional Fruits & Vegetable Processing: Pulps, Purees, Pastes; Jam/Jelly/Marmalade; Sauces & Ketchups; Pickles; Chutneys; Squashes/Syrups etc.
- Rice Mills: Asiel has capability to set up most modern rice mills with state of the art technology.
- Powdered Spices, Besan, Sattu etc. on medium to large scale.

Panel of Expert(s) in Food Processing at Asiel

- **Mr. Chittaranjan Ghosh**, M.Sc (Food Tech) CFTRI has 28 years of working in companies like Keventer Agro, Duncan Agro, ITC etc.
- **Dr. Dipankar Basu**, Ex-Corporate Head, Q.C. of Britannia Industries Ltd.
- **Mr. Asit Ghosh**, Ex-Chief Engineer, Britannia Industries Ltd
- **Mr. Basudev Saha**, M.Sc (Food Tech-CFTRI, PGDM-IIMC) Ex-GM Hindustan Vegetable Oil Corporation.
- **Mr. Amit Kr. Acharya**, M.Sc (Food Tech, CFTRI) Ex-GM CDF, Aligarh.
- **Mr. P.P. Bhattacharyya**, M.Sc (Dairy Tech), MBA, worked for NDDB for more than 25 years.

Agriculture & Horticulture

Asiel Consultant has expertise in the following fields:

1. Hi-Tech Horticulture- includes Tissue Culture, Green House, Poly House, Shed-Net etc. for cultivation of exotic vegetables like Brocoli, Colored Capsicum, Cherry Tomatoes etc.; fruits like Banana, Papaya, Mango, Litchi, Guava etc.; propagation of fruits & orchards.
2. Floriculture- for cultivation of flowers, packaging & preservation.
3. Seed Production: Vegetables, Cereals, Pulses & Oilseeds.
4. Soil Testing.
5. Integrated nutrient management, integrated Pest Management.
6. Bio-Fertilizer & Bio-Pesticides- Production & Management.
7. Organic Farming.
8. Pisciculture: Freshwater Fisheries including Scampi (Galda Chingri) , Brackishwater Fisheries (Shell Fishes-Bagda Chingri, Vanamei etc. & Finfishes).
9. Induced Breeding of IMC (Indian Major Carps-Rohu, Katla, Mrigel etc.).
10. Goat Farming.
11. Poultry Farming with latest techniques.
12. Contract Farming.
13. Subsidies from Central & State Govt. & other bodies like NHB, NHM, NABARD etc.
14. Linkage with Agril Universities, Research Institutes, Govt. Departments etc.

Panel of Expert(s) in Agriculture and Horticulture at Asiel

Dr. Ashoke K. Chatterjee, Ph.D, Ex-Sr.Scientist-ICAR. He is Principal Consultant of Agri-Horti Division.

PROSPECTS FOOD PROCESSING, AGRICULTURE & HORTICULTURE

Food Processing

Food processing involves any type of value addition to agricultural or horticultural produce and also includes processes such as grading, sorting, packaging which enhance shelf life of food products. The food processing industry provides vital linkages and synergies between industry and agriculture. The Food Processing Industry sector in India is one of the largest in terms of production, consumption, export and growth prospects. The government has accorded it a high priority, with a number of fiscal reliefs and incentives, to encourage commercialization and value addition to agricultural produce, for minimizing pre/post harvest wastage, generating employment and export growth. India's food processing sector covers a wide range of products fruit and vegetables; meat and poultry; milk and milk products, alcoholic beverages, fisheries, plantation, grain processing and other consumer product groups like confectionery, chocolates and cocoa products, Soya-based products, mineral water, high protein foods etc.

Indian food processing industry is widely recognized as a 'sunrise industry' having huge potential for uplifting agricultural economy, creation of large scale processed food manufacturing and food chain facilities, and the resultant generation of employment and export earnings. The industry is estimated to be worth around US\$ 67 billion and employing about 13 million people directly and about 35 million people indirectly. The food processing sector in India is geared to meet the international standards. Food Safety and Standards Authority of India has the mandate to develop standards and also to harmonise the same with International Standards consistent with food hygiene and food safety requirement and to the conditions of India's food industry.

Advantage in India

- India is one of the largest food producers in the world
- India has diverse agro-climatic conditions and has a large and diverse raw material base suitable for food processing companies
- India is looking for investment in infrastructure, packaging and marketing
- India has huge scientific and research talent pool
- Well developed infrastructure and distribution network
- Rapid urbanization, increased literacy, changing life style, increased number of women in workforce, rising per capita income- leading to rapid growth and new opportunities in food and beverages sector
- 50 per cent of household expenditure by Indians is on food items
- Strategic geographic location (proximity of India to markets in Europe and Far East, South East and West Asia).

India's Position in World's Production

- Largest producer of milk in the world (105 million tonnes per annum)
- Largest livestock population(485 million tonnes per annum)
- Second largest producer of fruits & vegetables (150 million tonnes per annum)
- Third largest producer of food grain (230 million tonnes per annum)
- Third largest producer of fish (7 million tonnes per annum)
- 52% cultivable land compared to 11% world average
- All 15 major climates in the world exist in India
- 46 out of 60 soil types exist in India
- 20 agri-climatic regions

Key Growth Drivers of Food Processing Sector in India

- Increasing spending on health and nutritional foods.
- Increasing number of nuclear families and working women
- Changing lifestyle
- Functional foods, fresh or processed foods
- Organized retail and private label penetration
- Changing demographics and rising disposable incomes

Key Opportunities in Food processing Sector

- Processable varieties of crop
- Contract farming
- Investments in infrastructure through Public Private partnership (PPP)
- Mega Food parks
- Integrated cold chain
- Food safety Management System

Low level of processing

The industry has very low processing level i.e 2.2% for fruits and vegetables, around 35% in milk, 21% in meat and 6% in poultry products, which is significantly lower by international standards. For e.g. processing of agriculture produce is around 40% in China, 30% in Thailand, 70% in Brazil, 78% in the Philippines and 80% in Malaysia. Value addition to agriculture produce in India is just 20% with wastage estimated to be valued at around US \$13 billion.

Agriculture & Horticulture

Food is basic need of people. India has a population of 130Crores. Govt. has to ensure feeding such a vast population. So, Union Govt. is determined to make 2nd Green Revolution in the country with special importance to Eastern part of the country. Huge scope is there for developing Agriculture & Horticulture. Asiel Consultant can help in a big way in this endeavour.

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