# FRUIT PROCESSING

## DISCOVER. INVEST. PROFIT

**Total fruit production in Bangladesh accounts for more than 34 million metric tonnes and a wide range of fruits are cultivated. The favourable climatic and soil conditions allows for quality production of fruits.Availability of raw materials (fruits) with a consistent growth in production and demand for processed fruit products especially for maintaining nutritional requirement has opened up the market for fruit processing. Bangladesh supports local and foreign direct investment in fruitprocessing through policy support and tax benefits.**

## Overview of Fruit Production in Bangladesh

Traditionally fruit cultivation has been a major part of agricultural practices in Bangladesh. Indigenous fruits have potential for preparation of value added products and contribution to food security and income. In recent years,it has been observed that there is a steady rise in cultivation and production of fruits that can be processed.

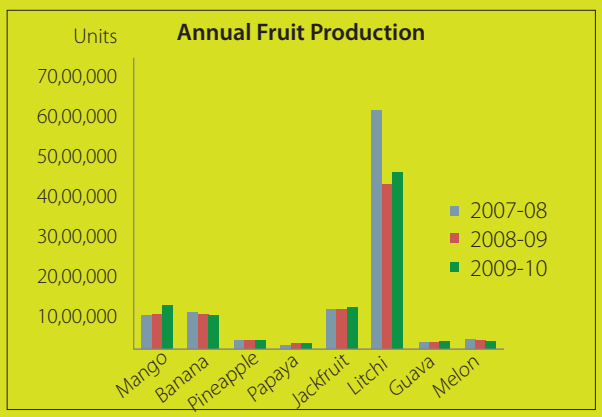


Figure1: Annual Fruit Production (BBS 2010)

Litchi, Mango, Jackfruit, Banana and Pineapple are the major fruits grown in Bangladesh

| Items | Growth Trends | | |
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| | 2007-08 | 2008-09 | 2009-10 |
| Mango | 5% | 3% | 27% |
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Figure 3: Harvesting period of fruits

## Growth Drivers

- Increased demand for processed products in domestic and international markets
- Increasing quality consciousness among consumers
- Increased demand for processed products in domestic and international markets
- Prospective markets within geographic proximity, i.e. Middle Eastern countries
- Expansion opportunity in new markets like Far East and Central Asia
- Domestic competition level is moderate
- Opportunities for import substitution in domestic market

## Fruit Processing in Bangladesh

Over the past few years, fruit processing industry in Bangladesh has been influenced by factors such as increased demand for convenient prepared meals, increased health and nutrition awareness, increased significance of branding and greater competition from private labels have also contributed to growth.

As much as 30 to 35 percent of Bangladesh's fruits and vegetables are wasted due to lack of processing and preservation facilities.

**Key points of Fruit Processing in Bangladesh**

- Mango (Gooty&Ashina) guava, tomato, banana and lichi are the main fruits processed for both domestic consumption and exports (often targeting the Bangladeshi ethnic community abroad)
- 70% fruit pulp in Bangladesh is imported
- Fruit canning is done on a small scale and primarily sold to Institutional Buyers i.e. food processing companies

| Fruit | Estimated Annual Pulp Quantity | Season when pulping is done | Procurement Cost (BDT) |
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| Annual Export of Processed Fruit Items | 90-100 Million USD |
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## Mango Processingin Bangladesh

Mango is the most common fruit item that is currently processed in Bangladesh. Bangladesh is ranked 9th in the global production of mangoes

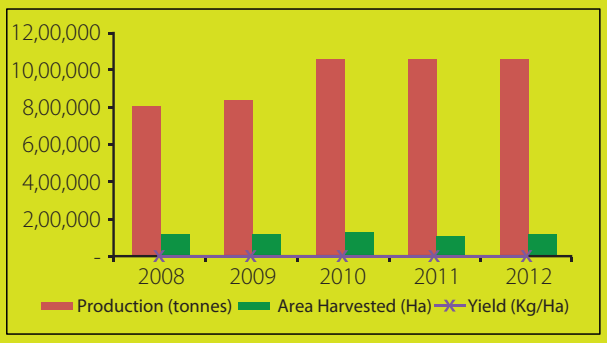


Figure 6: Annual Mango Production in Bangladesh (FAO)

- Mango fruit juice is a very popular item among consumers inboth domestic and international markets
- Canned Mango is a new segment. It is currently produced in small scales and largely caters to institutions, i.e. Food processing companies
- Mango pulping is profitable as it has an increasing demand from fruit processors offers a longer shelf-life and at more affordable price than imported pulps

| Processed Products | Annual Production | Export Market |
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The Global Fruit processing industry produces a variety of products including canned fruits, fruit juices, soups, sauces and dehydrated fruits. Overall, industry revenue is expected to grow at an annualized rate of 0.6% to reach $179.1 billion in the five years to 2013.

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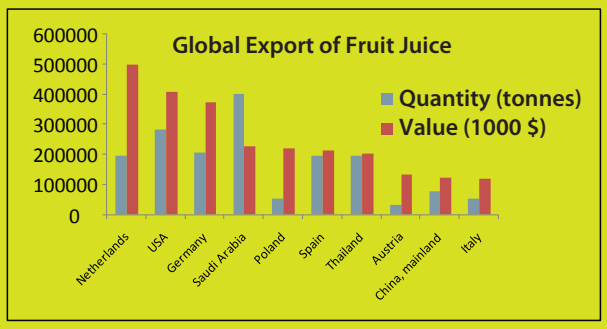


Figure 9: Global Export of Fruit Juice (FAO, 2011)

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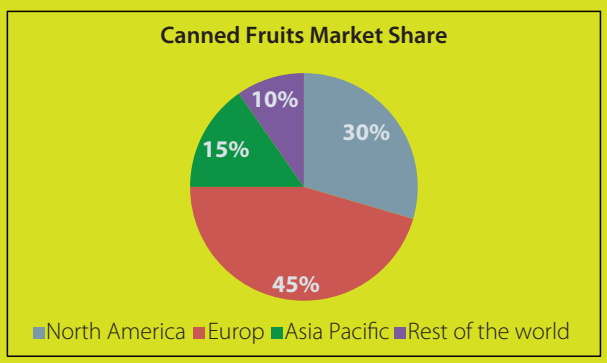


Figure 10: Global Canned Fruits Market Share (Transparency Market Research)

### Fruit Pulping

- Major Destinations of Fruit Pulp are Saudi Arabia, Yemen Arab Republic
- UAE, Netherlands, Japan, Singapore, USA, UK, Germany and UAE are for processed mango products like pickle and chutneys
- Average unit price realized from Mango Pulp exports ranged between USD 450-530 per ton

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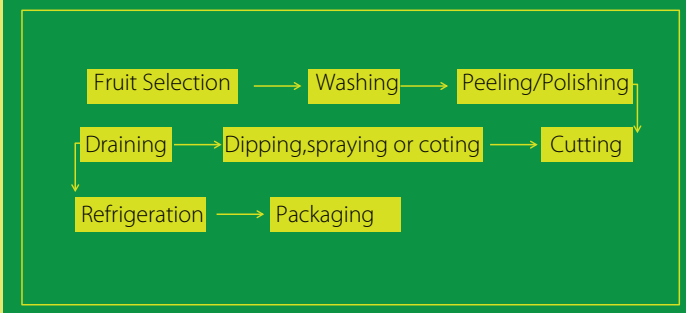
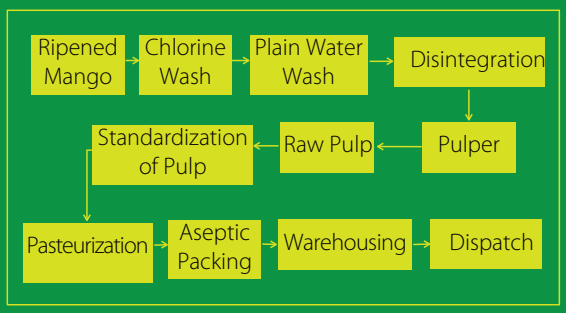
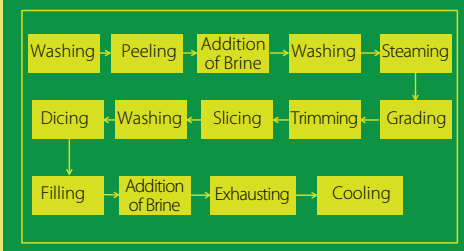


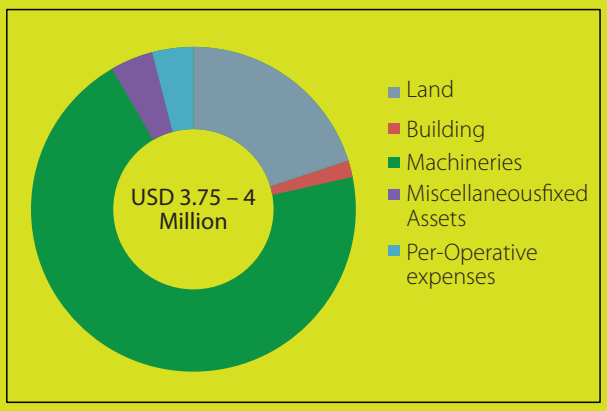




| Processed Product | Mango Juice | Canned Mango | Mango Pulp |
|---|---|---|---|
| Conversion Ratio | 10-15% | 40-50% | 50-80% |
| Selling Price | BDT 120-150/kg | BDT 80-100/kg | BDT 55-70/kg |

Figure 11: Mango Fruit Processing

### Investment Insights

Financial figures: Project - To manufacture canned fruit juice and pulp

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**Financial estimates for the below Production Units**

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| Land requirements | 2 Acres (8000 square meter) |
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| Implementation period | 6-12 months |
| Manpower required | 75 Nos. |
| Estimated Project Cost | 3.75 – 4 Million USD |
| Expected Annual Sales | 1.5 - 2.2 Million USD |

### Additional Opportunities for Fruit Processing in Bangladesh

| Fruit | Harvesting Period | Procure-ment Cost | Opportunities for processing |
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| Lichi | May-June | 2-3/piece | Juice& Jelly |
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### Business Incentives

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## RELEVANT STAKEHOLDERS

**Facilitating Institutions**

**Board of Investment Bangladesh (BOI)**
BOI encourages investment in private sector, identifies hindrance of investment and provides necessary failities and assistance in the establishment of industries

**Bangladesh Krishi Bank (BKB)**
The state owned bank provides credit facilities of farmers and agri-business owners.

**Bangladesh Agro-processors' Association (BAPA)**
Association of Agro Processing Companies in Bangladesh
**Vegetable Fruits and Allied Products Exporters' Association (VFAPEA)**
Association of Fruit and processed items Exporters

**Bangladesh Agricultural Development Corporation (BADC)**
BADC works in production, procurement, transport, storage and distribution of essential agricultural inputs.
Also there are **160 private seed supplicrs** working in the sector.

**Department of Agricultural Extension**
The extension services wing providing extension services and technical support on agriculture

**Bangladesh Standards & Testing Institution (BSTI)**
BSTI develops standards and maintains quality control of products.

Figure 13: Facilitating Institutions Mapping for Fruit Processing Sector

### Social Impact

Bangladesh offers a potential market forprocessing of fruits. Investment in the fruit processing sector can generate employment, reduce poverty and improve social security. A major segment of the rural population can be mobilized in the sector and this would strengthen market linkages within the fruit processing industry. Moreover, processed fruits are great sources of vitamins and minerals and can be instrumental in improving overall health and nutrition in Bangladesh.

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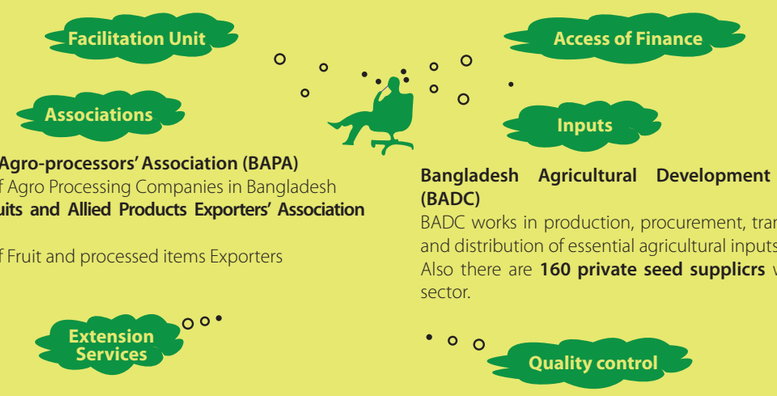


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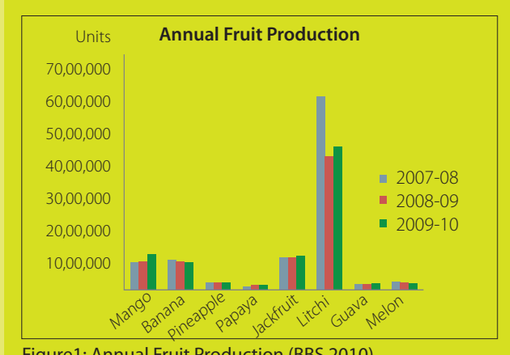


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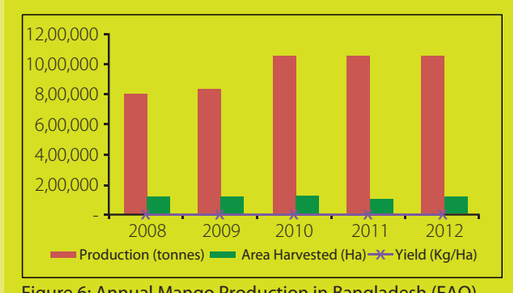


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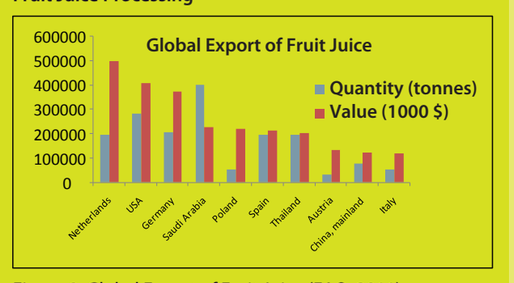


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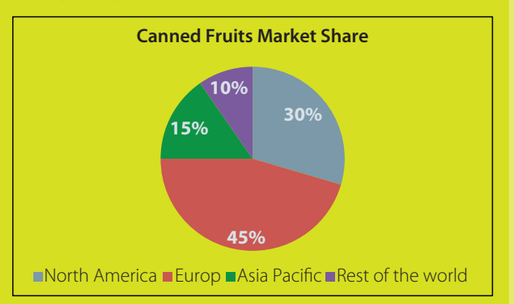


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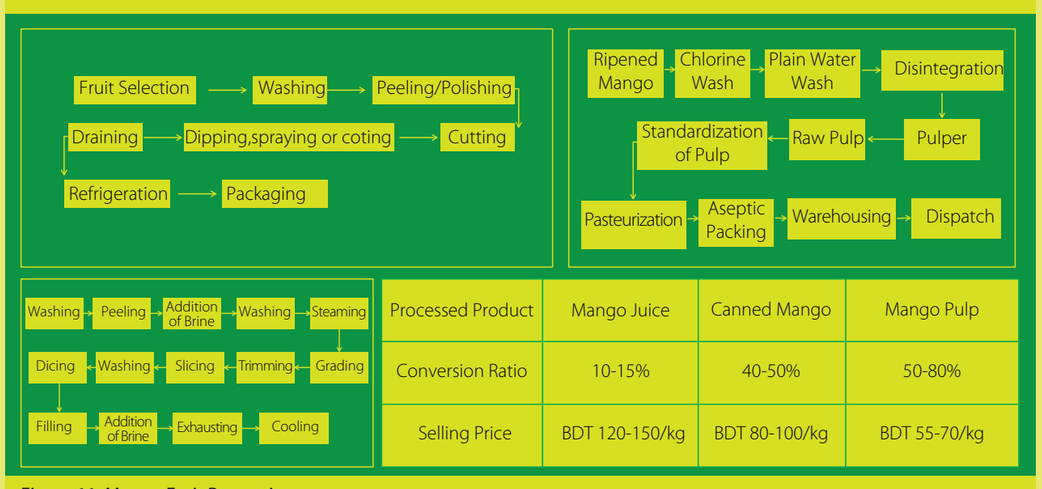


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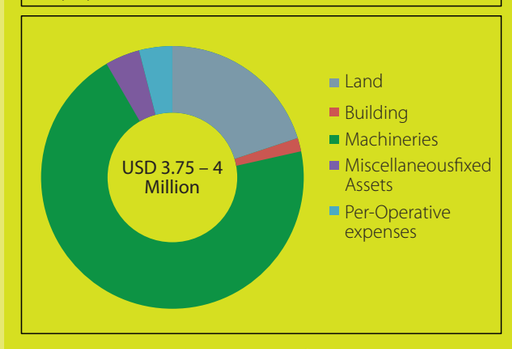


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