

## PACKAGING AND EQUIPMENT

The Indian Food Processing and Packaging Equipment (FPP) segment is expanding rapidly. The 1994/95 market was estimated at \$415 million and growing 30% annually. Both semi- and fully automatic FPP machinery are made locally, supplying 80% of domestic demand. Domestic manufacturers produce a limited range of FPP machinery for rigid containers, corrugated boxes, plastic forming, bottling liquids, equipment for pre-chilling fruits and processing specific types of fruit and vegetables, automatic form fill and sealing machines for packing teas and other food products, shrink-wrapping, vacuum packing, nitrogen flush packing, air pressurized packing, etc.. Major suppliers of imports are Germany (35% import market share), USA (25%), UK, Sweden, Italy and Japan. Market demand for FPP machinery related to dairy products, processed foods, vegetable and fruit processing and edible oils is expected to grow. A number of large corporations are engaged in the manufacture of packaging materials, packaging forms and packaging machinery and systems. Among these are Tetra-Pak, India Foils, Cosmo Forms, Garware Polyester and Plastics, Mazda Packaging, Bajaj Plastics, Pearl Polymers, Kesoram Industries, Metal Box, Asian Cans and Closures and Poysha Industries.

Packaging costs for the food processing industry tend to be relatively high and the availability of new materials is somewhat limited. However, with increasing volumes of demand and competition, availability is expected to improve and costs are expected to come down. In addition, the value of packaging as a marketing tool is now becoming widely acknowledged, especially for products intended for export. While a large proportion of raw materials required for production of packaging are available domestically, a substantial amount of tin and plastics have to be imported. Although freight and duties make imports expensive, duty free or concessional duties on imports and the duty drawback system justify their use for packaging products intended for the export market. India currently imports metallized multi-layer films of PET/BOPP/Nylon, aseptic packaging, Tetra packs, composite cans for liquid products, sterile packaging, recyclable and reusable packaging products. Cadbury India Ltd., Nestlé India Ltd., Hindustan Lever Ltd., Milkfood, Smith Kline and Beecham Ltd., Britannia and Dalmia Industries, in addition to government owned firms such as the National Dairy Development Board, state owned milk cooperatives and agro-industries corporations are major consumers of FPP machinery.

Canadian companies can investigate opportunities in:

*Dairy products:* machinery to process 100,000 litres of milk/day; milk vending machines; equipment used in the manufacture and packaging of milk powder; homogenizers; continuous butter making; self-cleaning type separators; butter molding and wrapping.

*Fruits & Vegetables:* prechilling, refrigeration, IQF/blast freeze systems; continuous drying systems; aseptic unit packs for processing large quantities; cleaning/sorting/grading fruits and vegetables; fruit waxing and polishing.

*Spices:* spice sterilization plants; oleoresin processes; super critical carbon dioxide extraction plants; cleaning and grading systems.

*Oilseeds:* rice bran extraction; protein isolates from oilseed extraction; modern expeller/refining systems.