

INCREASING CONSUMPTION OF TROPICAL AND SUBTROPICAL FRUITS

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The tropical and subtropical fruit industry is an important sector in many countries in generating income and employment, provides foreign exchange earnings and as an important source of nutrition and dietary requirements for a healthy population. It is a vibrant sector with progressive expansion in production, international trade and consumption.

Global Production

During the last five years (2000-2004), global production of tropical and subtropical fruits registered an annual growth rate of 3.5 percent. The production of all fruit types has increased by 19.2 percent, from 227 million tonnes in 2000 to 270 million tonnes in 2004. Watermelon registered the largest production volume in 2004. With an annual growth rate of 4.8 percent, watermelon production of 95.3 million tonnes in 2004 accounted for 35 percent of global tropical fruit production. The other major fruits with significant production volumes and annual growth rates are bananas, mangoes, pineapples and papayas.

Asia is the largest tropical fruit producing region, with a production of 178 million tonnes in 2004 which accounts for 66 percent of total global production. The other major regions are America (53 million tonnes) and Africa (25 million tonnes). Among the Asian countries, China is the world's largest producer of tropical fruits. Total production by China in 2004 amounted to 96.3 million tonnes which accounted for 54 percent of total global production.

Export of Fresh Tropical Fruits

During the last five years, there has been significant growth in the international trade of tropical and subtropical fruits. The volume exported has increased by 31 percent from

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27.5 million tonnes in 2000 to 35.9 million tonnes in 2004. In terms of value, the global export market in 2004 is estimated at USD15 billion. The export market is dominated by bananas and pineapples. In 2004, the export of bananas (15.8 millions tonnes valued at USD6.7 billion) accounted for 44 percent of the global export trade. The export value of pineapples in 2004 is estimated USD2.4 billion.

Trade data for the last five years indicate that although Asia is the largest producing region, it ranks second to America in terms of exports. The export value from America in 2004 was estimated at USD6.1 billion as compared to Asia's export value of USD2.5 billion. America's export in 2004 accounted for 46 percent of total global exports, with an increase of 6.6 percent from 14.4 million tonnes in 2000 to 16.5 million tonnes in 2004. The major fruit exported by the American region is bananas, especially from Ecuador (4 million tonnes) and Costa Rica (1.84 million tonnes). In the Asian region, the major exporting countries are the Philippines (bananas and pineapples) and Thailand (pineapples).

Imports of Tropical Fruits

On the demand side, global imports of tropical and subtropical fruits during the last five years have expanded by 25 percent from 28 million tonnes in 2000 to 35 million tonnes in 2004. Global imports in 2004 was estimated at USD18 billion, with the major European countries (Germany, Netherlands, France and United Kingdom) accounting for about 50 percent of these imports. USA is the single largest importing country in 2004 with a volume of nine million tonnes valued at USD3.4 billion. In the Asian region, Japan is the largest importing country, particularly for bananas, grapefruits and pineapples.

Consumption of Tropical and Subtropical Fruits

Fruits constitute an important nutritional component in the daily diet. The FAO/WHO Expert Consultation Meeting in 2003 has recommended a daily intake of more than 400 grams of fruits or 150 kg per person per year.

There is a healthy increasing trend in the consumption of tropical and subtropical fruits during the last five years. Global consumption has increased by 18 percent from 193

million tonnes in 2000 to 228 million tonnes in 2004, representing an average annual per capita consumption of 34.4 kg. The average per capita consumption in 2004 is estimated at 36 kg which is equivalent to 24 percent of the recommended intake of all fruits. Watermelons and bananas rank the highest in terms of global intake of tropical and subtropical fruits. The per capita consumption of watermelons and bananas in 2004 is estimated at 12.3 kg and 9.3 kg, respectively.

Regionally, Asia registered the highest consumption quantity with an annual average of 137 million tonnes. This can be attributed to the fact that Asia is the largest producer of tropical fruits. In terms of per capita consumption of tropical fruits, Asia ranks third in the world with an average of 36 kg/cap/yr.

Nutrition and Health Properties of Tropical and Subtropical Fruits

Tropical and subtropical fruits are important sources of vitamins and minerals and many of these fruits are also high in dietary fibre. Research findings also indicate that these fruits contain micronutrients, phytochemicals and antioxidants which could contribute to human well-being and health. In many countries, these fruits are also used for the prevention and as healing remedies for a number of illnesses and diseases. With these properties, there is a vast potential for innovation and development of new products from these fruits in the functional food and nutraceutical industries.

Various campaigns to promote fruit consumption have been initiated by WHO and national organisations. The most prominent campaign is the “5 A Day Programme” promoting the consumption of at least five servings of fruits per day and increasing the availability of fruits in schools and worksites.

Conclusion

The tropical and subtropical fruit industry has registered healthy expansion in production, international trade and consumption trends. This important sector has the vast potential for further exploitation for the development of new products, especially processed products as tropical and subtropical fruits are highly perishable with short storage life. There is also commercial potential for the extraction of phytochemicals, nutraceuticals and metabolites from these fruits.

The following partnership projects are proposed for further development of the tropical and subtropical fruit sector:

- Tropical Fruit Consumption Campaign and Human Health
- Conservation and utilization of traditional fruit species
- Nutritional studies such as nutrient contents of fruit species, epidemiological studies, and phytochemicals / metabolites in fruits.
- Organic fruit cultivation
- The development of a Global Information System for Tropical and Subtropical Fruits (production, trade, consumption, and nutritional and health information).